



Sump systems made from steel or PE



Shelving systems for hazardous substances



Chemicals and poisons cabinets



Cabinets for hazardous substances



Outdoor storage systems / Projects



Fire protection container systems



Gas cylinder storage systems



# THE HAZARDOUS SUBSTANCES EXPERT

# "The Hazardous Substances Expert 2024"

# Dear customers and business partners,

Today we present you our new catalog "The Hazardous Substances Expert 2024".

New developments, newly certified and tested products, but also revisions of proven bestsellers enable us to present one of the most comprehensive product ranges in Europe in the field of environmentally compatible hazardous materials storage.

Since our company foundation in 1997, we have been pursuing our vision:

# Maximum protection of humans and the environment for the storage of hazardous substances!

Trust in tested, legal and long-lasting quality products Made by LaCont - Made in Germany.



Klaus Heßmer Managing Director

# Our basis for your safety:

- Certified specialist according to WHG
- Monitoring contract with TÜV Nord
- Manufacturer qualification acc. to EN 1090-2 execution class C2
- Certified as per DIN EN ISO 9001
- Certified as per DIN EN ISO 14001
- General Technical Approval of DIBt Berlin
- Certificates in accordance with steel trough guidelines (StawaR)
- Fire chamber tests and test reports acc. to DIN EN 14470-1 and DIN EN 14470-2









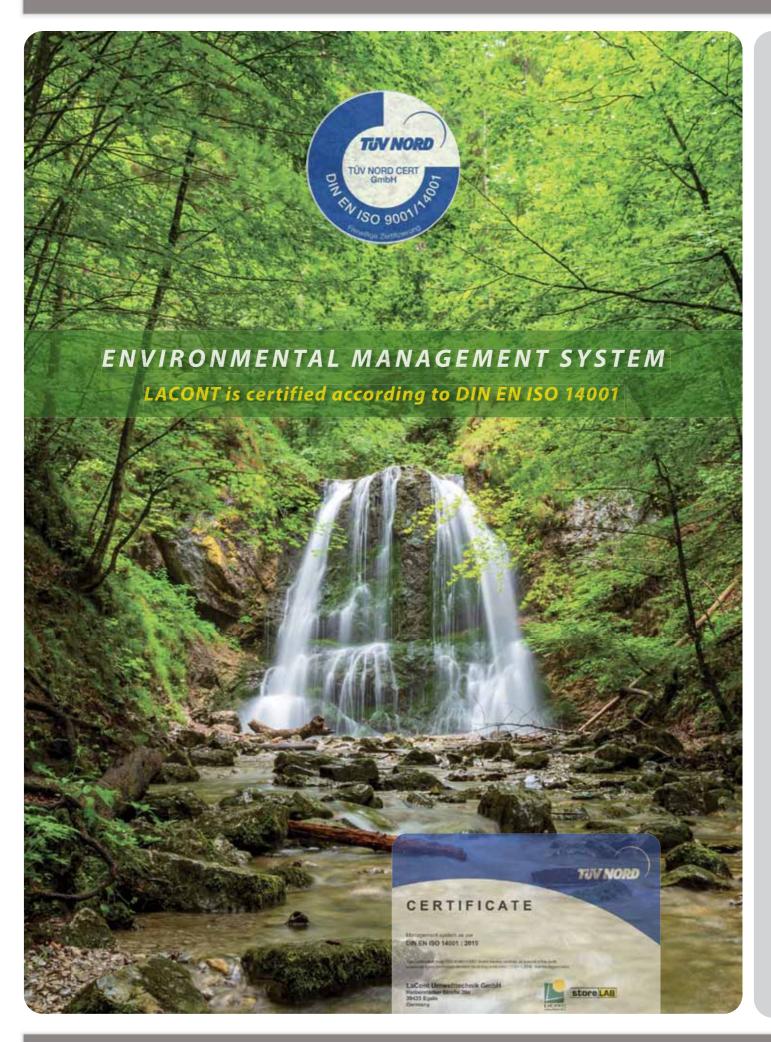
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# SHORT INTRODUCTION LACONT



# **CERTIFIED QUALITY**



# **PRACTICAL INFORMATION**

1	Globally harmonized system (GHS) CLP regulation (EG) No. 1272/2008	page 7		
1	GHS-hazard class - old and new symbols	page 8/9		
2	Checklist for "Your hazardous substance storage"	page 12		
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9	Ventilation of hazardous substances storage	page 159		
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11	Gas cylinder storage regulations	page 192	# * 	
12	TRGS 510 - Overviews of clastering	page 204		

## Symbol keys (explanations):



MVV TB Nr. C2.15.12

Ü-sign for

steel sump pallets

steel troughs guidelines

TüV-Nord











General Technical Approval

General technical approval



per DIN EN 14470-1



Fire chamber test as Fire chamber test as per DIN EN 14470-2

Galvanized

version

**Bearing constitution and storability:** 



suitable \*)

limited suitability \*)

🗶 unsuitable

\*) Please observe the current legal requirements, materials safety data sheets and consult the previously mentioned practical information.

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# **PRACTICAL INFORMATION 1**

#### Globally harmonized system (GHS) in the EU

#### the new classification and labeling in accordance with CLP regulation (EG) No. 1272/2008

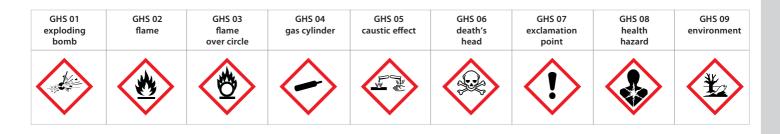
- Became valid on January 20, 2009.
- It regulates classification, labeling and packaging of substances and mixtures
- CLP = Regulation on Classification, Labelling and Packaging of substances and mixtures
- GHS = Globally Harmonized System
- Replaces the European guideline of substances 67/548/EWG as well as preparation directive 1999/45/EG

Regulation (EC) No 1272/2008 introduced a single European labeling system based on the Global Harmonized System (GHS). It standardizes the classification and labeling of hazardous substances and their mixtures and aligns them with the dangerous goods transport law ADR / GGVSEB.

The GHS classification distinguishes between danger classes and danger categories. Instead of the 15 risk characteristics, there are now 28 danger classes. The respective danger classes are subdivided into danger categories to indicate the severity of danger. The information is to be supplemented by given danger warnings (H phrases and EUH phrases), signal words and safety instructions (P phrases).

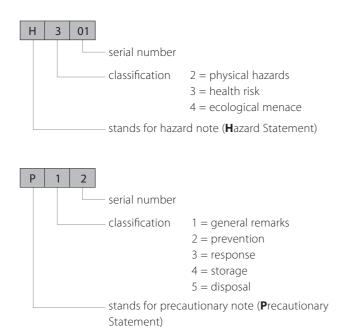
Furthermore, their classification criteria serve as the basis for further legislation based on the hazard classification, such as the 4th and 12th BImSchV for the reorientation of the assignments requiring approval to storage facilities or accident management companies.

The CLP Regulation will be adapted as necessary to the changed needs and continuously revised, currently exists the 20. ATP (Adaptation to the Technical Progress).



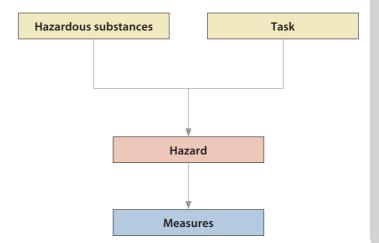
#### Setup of H- and P-clauses

While the previous R- and S-clauses have been subjected to no particular system, the new hazard (H) and precautionary notes (P) are classified.



#### Regulation on hazardous substances (GefStoffV) new 2010!

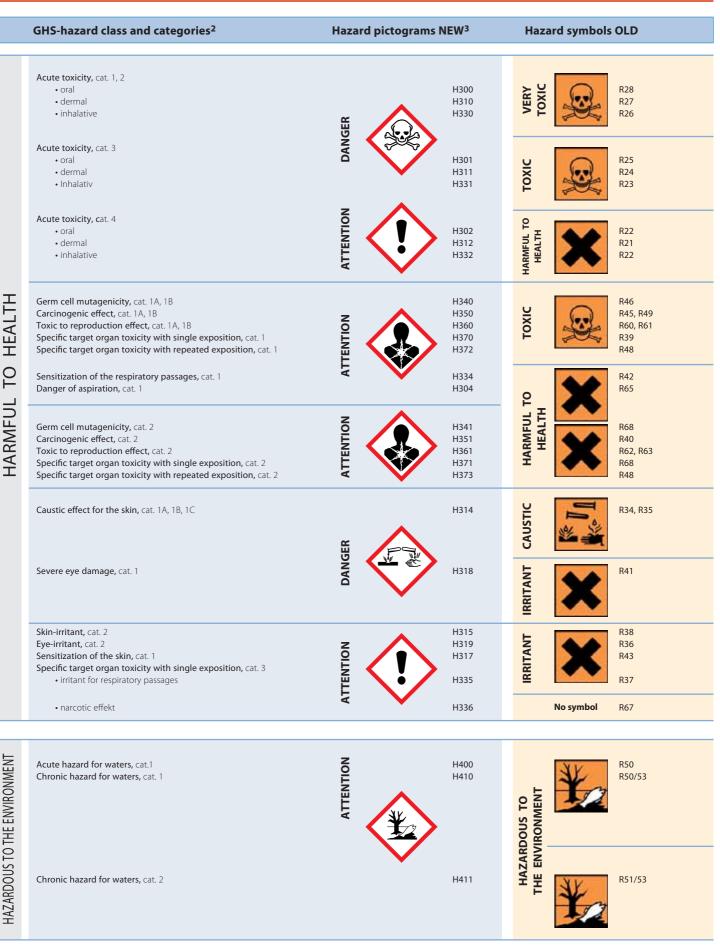
According to the new regulation on hazardous substances 2010 a near-term adapting to CLP- and REACH-regulation has succeeded. The new regulation on hazardous substances is absolutely hazard-minded. The determination of precautionary measures is exclusively a result of a risk assessment. This can be easily derived from the following chart:



		HAZARD STMDOLS NEW (			
	GHS-hazard class and categories <sup>2</sup>	Hazard pictograms N	EW <sup>3</sup>	Hazard symbols OLD	
	Explosive substances/mixtures • unstable, explosive • explosive, cat. 1.1 - 1.3 Self-reactive substances and mixtures, types A, B Organic peroxides, types A, B	HI HI	200 201, H202, H203 240, H241 240, H241	(R2, R3)	
	Explosive, cat. 1.4	HI ATTENTION	204	No labeling	
	Flammable gases, cat. 1 Flammable aerosols, cat. 1 Flammable liquids, cat. 1 Flammable liquids, cat. 2	HI HI		-X-THERE (R12) (R12) R12 R12 R11 (R11) (R11) (R11)	
	Flammable solids, cat. 1 Flammable solids, cat. 2	E HI	228 228	Easily-	
PHYSICAL HAZARDS	Flammable aerosols, cat. 2 Flammable liquids, cat. 3		223 226	H No (R10) B symbol R10 W W No labeling G (flash point 56-60°C)	
	Pyrophoric liquids, cat. 1 Pyrophoric solids, cat. 1 Substances and mixtures which emit flammable gases upon contact with water, cat. 1, 2 and cat. 3 Self-reactive substances and mixtures, type B Self-reactive substances and mixtures, types C, D and types E, F Self-heating substances and mixtures, cat. 1 and cat. 2 Organic peroxides, type B Organic peroxides, types C, D Organic peroxides, types C, D Organic peroxides, types E, F Oxidizing gases, cat. 1 Oxidizing liquids, cat. 1, 2 and cat. 3 Oxidizing solids, cat. 1, 2 and cat. 3	DANGER ATTENTION DANGER	250 250 260 261 261 241 242 242 251 252 241 252 241 242 242	Image: Space spac	
	and cat. 3 Gases under pressure • solidified gases • liquefied gases • deep-frozen liquefied gases • dissolved gases		272 280 280 281 280	No labeling	
	Substances and mixtures corrosive to metals, cat. 1	ATTENTION	290	No labeling	

BY COMPARISON: HAZARD SYMBOLS NEW (GHS)<sup>1</sup> AND OLD (EU)

<sup>1</sup>Comparison of risk characteristics (allocation) according to labeling elements, symbol (EU old) and pictogram (GHS).



BY COMPARISON: HAZARD SYMBOLS NEW (GHS)<sup>1</sup> AND OLD (EU)

# <sup>2</sup>source: annex I of the regulation (EG) no. 1272/2008.

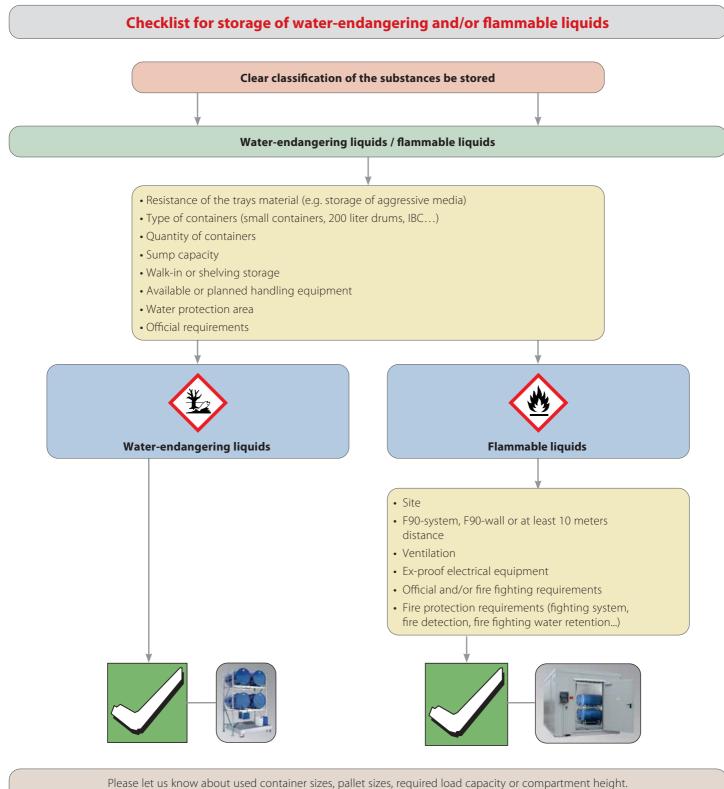
<sup>3</sup>source: annex VII of the regulation (EG) no. 1272/2008.





#### **PRACTICAL INFORMATION 2**

The planning and realization of hazardous substances storage requires the reconcilement of countless individual aspects. For example type and quantity of stored hazardous substances, local conditions and available space, the legal regulations and official requirements, and not at least the available budget has to be brought to a common denominator. Our checklist is intended to help you with this.



This might be helpful to submit an offer.

Please note that we are only able to render assistance at this. Each case must be considered separately. We are pleased to assist you gladly.

# TABLE OF CONTENTS - STEEL SUMPS





KTC sump pallets page 26-27



Large-volume sump pallets / Custom-made versions page 28-29





# SUMP TRAYS FOR SMALL CONTAINERS

# For the storage of water-endangering and flammable liquids in small containers

- Base sump tray made from 3 mm galvanized sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- For placing flat on the floor
- PE inserts are available for all models for the storage of acids and alkalis





Model	KGW 20	KGW 30	KGW 35	KGW 40	KGW 80
External dimensions W x D x H (mm)	500 x 500 x 123	996 x 596 x 75	1296 x 596 x 70	1000 x 500 x 123	1000 x 1000 x 123
Sump capacity (I)	20	30	35	40	80
Weight (kg)	12	21	26	21	36
Article no., galvanized	P25-1305-A	P25-1306-A	P25-1302-A	P25-1303-A	P25-1304-A

Accessory	PE insert for storage of aggressive media						
Article no.	P25-1310-A	R71-2170-A	R71-2171-A	P25-1313-A	P25-1314-A		



# SUMP PALLETS FOR 60 LITER DRUMS

# For the storage of water-endangering and flammable liquids in containers and drums up to 60 liter

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Removable galvanized grid
- Ground clearance 100 mm for internal transport ٠
- Corrosion protection by primer coating and painting or by galvanized sheet steel
- PE inserts are available for all models for the storage of acids and alkalis





Article no. P64-2051-A



CW 60-4, Article no. P64-2052-A





Article no. P64-2053-A



CW 60-2, Article no. P64-2051-A, with optional PE drum stand



CW 60-4, Article no. P64-2052-A, with optional PE drum stand

Model	CW 60-2	CW 60-4	CW 60-6
Capacity, 60 liter drums	2	4	б
External dimensions W x D x H (mm)	820 x 500 x 280	900 x 820 x 215	1250 x 820 x 190
Sump capacity (l)	60	60	60
Max. load (kg)	150	300	450
Weight (kg)	32	40	50
Article no., painted	P64-2051-A	P64-2052-A	P64-2053-A
Article no., galvanized	P64-1051-A	P64-1052-A	P64-1053-A

Accessory	PE insert for the storage of aggressive media				
Article no.	P64-2061-A	P64-2062-A	P64-2063-A		



#### COMPACT SUMP PALLETS FOR 200 LITER DRUMS

# For the storage of water-endangering and flammable liquids

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Removable galvanized grid
   Ground clearance 100 mm for internal transport
- Corrosion protection by primer coating and painting or by <u>fire-galvanized</u> sheet steel
- PE inserts are available for all models for the storage of acids and alkalis





Model	<b>CW</b> 1	CW 2	CW 3	<b>CW 4</b>	CW 4L	<b>CW</b> 8
Capacity, 200 liter drums	1	2	3	4	4	8
External dimensions W x D x H (mm)	810 x 820 x 450	1250 x 820 x 340	1850 x 820 x 270	1325 x 1320 x 250	2400 x 820 x 240	2400 x 1220 x 210
Sump capacity (l)	210	210	210	210	210	210
Max. load (kg)	250	500	750	1000	1000	1600
Weight (kg)	60	73	95	110	117	150
Article no., painted	P65-2001-A	P65-2002-A	P65-2007-A	P65-2003-A	P65-2004-A	P65-2005-A
Article no., fire-galvanized	P65-1001-A	P65-1002-A	P65-1007-A	P65-1003-A	P65-1004-A	P65-1005-A

Accessory	PE insert for the storage of aggressive media					
Article no.	P65-2010-A	P65-2011-A	P65-2017-A	P65-2012-A	P65-2013-A	P65-2014-A
And the first	105 2010 1	105 2011 /	105 2017 11	105 2012 //	105 2015 //	105





## PALLET SUMPS

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign ٠ according to StawaR
- For placing on euro- or chemical pallets
- In combination with drum stand also suitable for horizontal storage
- Available with and without grid support
  - \* maximum capacity when used with galvanized grid



EW 2, painted, with grid, Article no. P66-2303-A

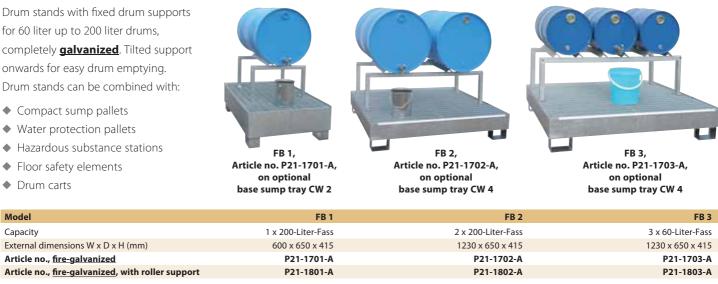


EW 2, fire-galvanized, without grid, Article no. P66-1301-A

Model	EW 2 (for e	euro-pallets)	EW 4 (for chemical pallets)		
Version	without grid	with grid	without grid	with grid	
Dimensions W x D x H (mm)	1250 x 820 x 240	1250 x 820 x 240	1220 x 1220 x 210	1220 x 1220 x 210	
Sump capacity (l)	210	210	210	210	
Capacity, vertical drums*	2 drums	2 drums	4 drums	4 drums	
Weight (kg)	50	73	60	85	
Article no., painted	P66-2301-A	P66-2303-A	P66-2302-A	P66-2304-A	
Article no., fire-galvanized	P66-1301-A	P66-1303-A	P66-1302-A	P66-1304-A	

Drum stands with fixed drum supports for 60 liter up to 200 liter drums, completely **galvanized**. Tilted support onwards for easy drum emptying. Drum stands can be combined with:







## DRUM CARTS FOR 60 / 200 LITER DRUMS

#### For the transport of water-endangering and flammable liquids

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Removable galvanized grid
- Corrosion protection by primer coating and painting or
- by **fire-galvanization**
- Equipped with 2 fixed and 2 swiveling castors and push bar as standard







WSP-2OS/W, <u>fire-galvanized</u>, Article no. P21-1407-A, with optional drum stand



Suitable drum stands can be found on page 17!



WSP-1OS/W, Article no. P21-2406-A, with optional tension belt



WSP-205/W60, Article no. P21-1408-A

Accessories

Tension belt

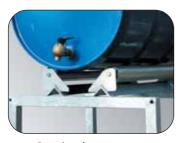
Rotating drum support



PE drum carts can be found on page 39!



WSP-2OS/W, <u>fire-galvanized</u> Article no. P21-1407-A



Rotating drum support, Article no. Z50-1925-B

Model	WSP-2OS/W60	WSP-1OS/W	WSP-2OS/W
External dimensions W x D (mm)	820 x 500	800 x 860	800 x 1400
Height (without push bar) (mm)	345	525	405
Sump capacity (I)	60	220	220
Capacity, 200 liter drums (vertical)	2 x 60	1 x 200	2 x 200
Article no., painted	P21-2408-A	P21-2406-A	P21-2407-A
Article no., fire-galvanized	P21-1408-A	P21-1406-A	P21-1407-A





#### For the storage of water-endangering liquids

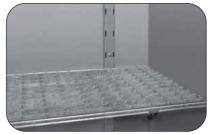
- Base sump tray made from 3 mm sheet steel
- ◆ Base sump tray according to WHG Ü-sign according to StawaR
- Ground clearance 100 mm for internal transport
- Lockable versions also suitable for storage outdoors
- Sump capacity 220 liter
- Corrosion protection by primer coating and painting of sump pallet
- Weather-proof superstructure made from galvanized sheet steel, with venting slots in the side walls
- Compartment for documents in the door(s) as standard



Article no. P21-2480-A



WSP-2SKKS-D, Article no. P21-2481-A



Height-adjustable galvanized grids at intervals of 100 mm



Venting slots in the sidewalls



WSP-1SKKS-D/GR, Article no. P21-2482-A



WSP-2SKKS-D/GR, Article no. P21-2483-A

Model	WSP-1SKKS-D	WSP-2SKKS-D	WSP-1SKKS-D/GR	WSP-2SKKS-D/GR
Capacity, 200 liter drums	1	2	-	-
External dimensions W x D (mm)	900 x 750	1760 x 750	900 x 750	1760 x 750
Total height (mm)	1900	1720	1900	1720
Internal dimensions W x D (mm)	740 x 660	2 x 740 x 660	740 x 660	2 x 740 x 660
Compartment height (mm)	1360	1360	3 x 400	3 x 400
Sump capacity (I)	220	220	220	220
Max. load (kg)	250	500	250	500
Weight (kg)	132	196	146	230
Article no., painted sump pallet, galvanized superstructure	P21-2480-A	P21-2481-A	P21-2482-A	P21-2483-A





# WATER PROTECTION SUMP PALLETS



WSP-2STS, Article no. P21-2411-A, with optional safety chain



WSP-2SKS, Article no. P21-2421-A, with optional safety chain

with optional safety chain		with optional safet	ty chain				
Model	WSP-1STS	WSP-2STS	WSP-4STS	WSP-1SKS	WSP-2SKS	WSP-4SKS	
Capacity, 200 liter drums	1	2	4	1	2	4	
External dimensions W x D (mm)	870 x 810	1410 x 810	1410 x 1290	870 x 810	1410 x 810	1410 x 1290	
Total height (mm)	1520	1400	1320	1520	1400	1320	
Internal dimensions W x D (mm)	780 x 720	1320 x 720	1320 x 1200	780 x 720	1320 x 720	1320 x 1200	
Compartment height (mm)	1025	1025	1025	1025	1025	1025	
Sump capacity (l)	220	220	220	220	220	220	
Max. load (kg)	250	500	1000	250	500	1000	
Article no., painted	P21-2410-A	P21-2411-A	P21-2412-A	P21-2420-A	P21-2421-A	P21-2422-A	
Article no., fire-galvanized	P21-1410-A	P21-1411-A	P21-1412-A	P21-1420-A	P21-1421-A	P21-1422-A	

- Stable construction from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Ground clearance 100 mm for internal transport
- ♦ Sump capacity 220 liter
- Space-savings as models WSP-STS and SKS can be double-stacked
- Corrosion protection by primer coating and painting or <u>fire-galvanization</u>



Article no. P21-2501-A



WSP-2SSS, Article no. P21-1451-A, with optional tension belt



WSP-2STS, <u>fire-galvanized</u>, Article no. P21-1411-A, stackable, with optional safety chains

Model	WSP-2SSS	WSP-2SKS/Gitt	WSP-4SKS/Gitt
Capacity, 200 liter drums	2	2	4
External dimensions W x D (mm)	1410 x 810	1410 x 810	1410 x 1290
Total height (mm)	1300	1410	1320
Internal dimensions W x D (mm)	1320 x 720	1320 x 720	1320 x 1200
Compartment height (mm)	950	1025	1025
Sump capacity (l)	220	220	220
Max. load (kg)	500	500	1000
Article no., painted	P21-2451-A	P21-2501-A	P21-2510-A
Article no., fire-galvanized	P21-1451-A	P21-1501-A	P21-1510-A
Accessories	Article no.		
Tension belt	Z50-1920-A		

P21-2470-A

Safety chain







#### FLOOR SAFETY ELEMENTS 55

Water-endangering and flammable liquids are subject to strict safety regulations, not only for storage but also for daily routine procedures such as filling off, handling and transport. According to the regulations even empty containers must be stored by means of sump trays. This means that favourably priced solutions are required in accordance with the regulations. Floor safety elements are available for such cases.

- Made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Approved for water-endangering and flammable liquids
- Individual segments can be combined with each other optionally
- Distance between elements: 40 mm throughout
- With removable heavy-duty fire-galvanized grids
- Can be driven over by pallet trucks, on request by fork-lift trucks or road vehicles
- Galvanized for high corrosion protection

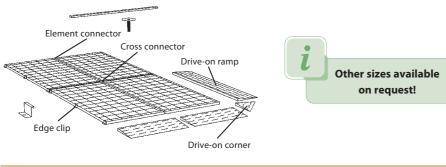
#### **Range of applications:**

- Empty container stores
- Laying of transport paths
- Revision of transformers
- Protection against splashes and leaks

Model	BS 14.14 / 55	BS 19.14 / 55	BS 29.14 / 55	BS 29.19 / 55
Base area W x D (mm)	1350 x 1400	1900 x 1350	2850 x 1400	2850 x 1900
Element height (mm)	55	55	55	55
Sump capacity (I)	43	60	91	124
Wheel load (kg)	450	450	450	450
Max. load (kg/m²)	5000	5000	5000	5000
Weight (kg)	140	186	285	380
Article no., galvanized	Р25-1200-В	P25-1201-B	P25-1202-B	P25-1203-B

Accessories		Drive-on ramps			
Туре	AF 13 / 55	AF 14 / 55	AF 19 / 55	AF 29 / 55	AE 55
Base area W x D (mm)	1350 x 550	1400 x 550	1900 x 550	2850 x 550	550 x 550
Wheel load (kg)	450	450	450	450	450
Weight (kg)	40	42	59	85	42
Article no., galvanized	P25-1210-A	P25-1211-A	P25-1212-A	P25-1213-A	P25-1226-A

Accessories	Element connectors				
Туре	VB 13	VB 14	VB 19	VB 29	
Dimensions W x D (mm)	52 x 1320	52 x 1370	52 x 1870	52 x 2820	
Article no., galvanized	P25-1220-A	P25-1221-A	P25-1222-A	P25-1223-A	





Accessories	Edge clips and cross connectors				
Туре	RK 55	KK 55			
Dimensions W x D (mm)	100 x 30	120 x 120			
Article no., galvanized	P25-1224-A	P25-1225-A			



TüV-Nord



# FLOOR SAFETY ELEMENTS 78





PE floor safety elements can be found on page 35!

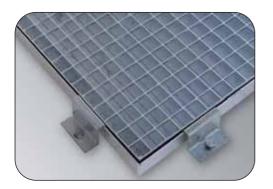
# • Particularly suitable for equipping individual rooms.

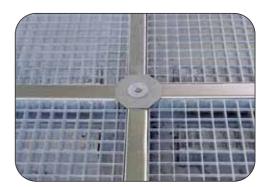
# Custom-made versions available!

Model	BS 14.14 / 78	BS 19.14 / 78	BS 29.14 / 78	BS 29.19 / 78
Base area W x D (mm)	1350 x 1400	1900 x 1350	2850 x 1400	2850 x 1900
Element height (mm)	78	78	78	78
Sump capacity (l)	84	119	178	242
Wheel load (kg)	450	450	450	450
Max. load (kg/m²)	5000	5000	5000	5000
Weight (kg)	134	187	287	387
Article no., galvanized	P25-1204-B	P25-1205-B	P25-1206-B	P25-1207-B

Accessories		Drive-on ramps			Drive-on corner
Туре	AF 13 / 78	AF 14 / 78	AF 19 / 78	AF 29 / 78	AE 78
Base area W x D (mm)	1350 x 730	1400 x 730	1900 x 730	2850 x 730	730 x 730
Wheel load (kg)	450	450	450	450	450
Weight (kg)	60	65	85	120	55
Article no., galvanized	P25-1214-A	P25-1215-A	P25-1216-A	P25-1217-A	P25-1227-A

Accessories	Element connectors				
Туре	VB 13	VB 14	VB 19	VB 29	
Dimensions W x D (mm)	52 x 1320	52 x 1370	52 x 1870	52 x 2820	
Article no., galvanized	P25-1220-A	P25-1221-A	P25-1222-A	P25-1223-A	





Accessories	Edge clips and cross connectors	
Туре	RK 78	KK 78
Dimensions W x D (mm)	100 x 30	120 x 120
Article no., galvanized	P25-1229-A	P25-1228-A



# FLOOR SAFETY ELEMENTS 123

#### For the storage of water-endangering and flammable liquids

- Made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Individual segments can be combined with each other optionally
- With removable heavy-duty fire-galvanized grids
- Galvanized for high corrosion protection





Model	BS 05.05 / 123	BS 10.05 / 123	BS 20.05 / 123	BS 25.05 / 123	BS 10.10 / 123	BS 20.10 / 123	BS 25.10 / 123
Base area W x D (mm)	500 x 500	1000 x 500	2000 x 500	2500 x 500	1000 x 1000	2000 x 1000	2500 x 1000
Element height (mm)	123	123	123	123	123	123	123
Sump capacity (l)	20	40	85	100	80	160	210
Wheel load (kg)	450	450	450	450	450	450	450
Max. load (kg/m²)	5000	5000	5000	5000	5000	5000	5000
Weight (kg)	28	52	100	125	83	162	201
Article no., galvanized	P25-1240-B	P25-1241-B	P25-1246-B	P25-1242-B	P25-1243-B	P25-1244-B	P25-1245-B

Accessories		Drive-on ramps			
Туре	AF 05 / 123	AF 10 / 123	AF 20 / 123	AF 25 / 123*	AE 123
Base area W x D (mm)	450 x 1150	950 x 1150	1950 x 1150	2450 x 1150	1150 x 1150
Wheel load (kg)	500	500	500	500	500
Weight (kg)	41	69	141	175	39
Article no., galvanized	P25-1260-B	P25-1261-B	P25-1262-B	P25-1263-C	P25-1264-B

Accessories	Element connectors				
Туре	VB 047	VB 097	VB 20	VB 25	
Dimensions W x D (mm)	52 x 470	52 x 970	52 x 1970	52 x 2470	
Article no., galvanized	P25-1250-B	P25-1251-B	P25-1252-B	P25-1253-B	

Accessories	Edge clips and cross connectors		
Туре	RK 123	KK 123	
Dimensions W x D (mm)	100 x 30	120 x 120	
Article no., galvanized	P25-1254-B	P25-1255-B	

\* delivered in two parts

Accessory	Ramp connectors
Туре	RV 123
Dimensions H x W x L (mm)	123 x 90 x 1150
Article no., galvanized	Р25-1256-В

24



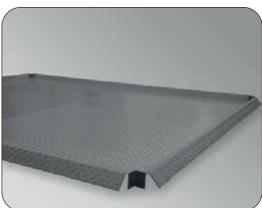
# MODULAR SURFACE PROTECTION SYSTEM

#### Suitable for use as mobile filling, transferring and / or tanking area with Ü-Sign

- Stable surface protection element
- ◆ 5/7 mm tear-drop flooring, primed and painted in RAL 7016 anthracite
- Welded leak-proof, with specific test report
- Suitable for vehicles with a wheel load up to 3 tons
- Can be extended/retrofitted at will
- Other sizes and sump capacities available on request
- Supplied as individual modules for laying down quickly and easily ---> READY FOR IMMEDIATE USE
- Floor anchors are not required as the elements are firmly laid by their own weight.



Mobile provisioning area



Accessible, non-slip surface, can be expanded as required



Refueling of vehicles: Leaking fuel is retained on the module system.



Model	Basic element FSS-M1	Extension panel FSS-M2
Base area W x D (mm)	2920 x 2380	2920 x 2380
System height (mm)	73	73
Sump capacity (I)	210	210
Weight (kg)	315	315
Article no., painted	P25-1300-A	P25-1301-A



# SUMP PALLETS FOR 1000 LITER CONTAINERS

#### For storing and filling off hazardous substances from large containers

- Made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Support surface is a removable fire-galvanized grid
- Ground clearance 100 mm for fork-lift truck transport
- High corrosion resistance with primer and painting or <u>fire</u>

#### <u>galvanized</u>

Type WSP-KTC-SSS with galvanized splash guards (delivered disassembled)



WSP-KTC-DR, <u>fire-galvanized</u>, Article no. P21-1607-A





WSP-KTC-OS, <u>fire-galvanized</u>, Article no. P21-1601-B



splash guards galvanized, Article no. P21-2605-A

Model	WSP-KTC-OS	WSP-KTC-ZW	WSP-KTC-DR	WSP-KTC-SSS
Dimensions W x D x H (mm)	1300 x 1360 x 790	2680 x 1300 x 480	3850 x 1300 x 385	1300 x 1360 x 1760
Sump capacity (l)	1000	1000	1000	1000
Max. load (kg/m²)	1500	1500	1500	1500
Article no., painted	P21-2601-B	P21-2602-B	P21-2607-A	P21-2605-A
Article no., fire-galvanized	P21-1601-B	P21-1602-B	P21-1607-A	P21-1605-A
Accessory		Acid-resi	stant PE-insert	
Article no.	P21-2610-A	P21-2611-A	P21-2613-A	P21-2610-A



# SUMP PALLETS FOR 1000 LITER CONTAINERS WITH FILLING STAND



- With resistant PE-inserts available for all models for storing acids and alkalis
- Chemical resistance of PE-insert as per chemical resistance list
- Sump capacity 1000 liter
- Max. load 1500 kg/m<sup>2</sup>

1





WSP-KTC-ZW-AS, painted, Article no. P21-2606-A



All sump pallets can also be supplied with PE-inserts !

WSP-KTC-DR-AS, painted, Article no. P21-2608-A

Model	WSP-KTC-AS	WSP-KTC-ZW-AS	WSP-KTC-DR-AS
Model	WSP-KIC-AS	WSP-KIC-ZW-AS	WSP-KTC-DK-AS
Dimensions W x D x H (mm)	1300 x 1360 x 1070	2620 x 1400 x 745	3940 x 1400 x 645
Filling stand dimensions W x D x H (mm)	1300 x 1100 x 320	2 x 1300 x 1100 x 320	3 x 1300 x 1100 x 320
Sump capacity (l)	1000	1000	1000
Max. load (kg/m²)	1500	1500	1500
Article no., painted	P21-2603-B	P21-2606-A	P21-2608-A
Article no., fire-galvanized	P21-1603-B	P21-1606-A	P21-1608-A
Accessory		Acid-resistant PE-insert	
Article no.	P21-2610-A	P21-2612-A	P21-2614-A



#### LARGE-VOLUME SUMP PALLETS

# For storing and filling off water-endangering and flammable liquids

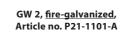
- Base sump tray made from 3 mm fire-galvanized sheet steel
- ♦ Base sump tray according to WHG Ü-sign according to StawaR
- Removable fire-galvanized grid
- Ground clearance for fork-lift transport
- Models GW 3 and GW 6 also suitable for storing 1000 liter containers
- Models GW 4 and GW 6 supplied as single sump pallets,
   i.e. the single sump pallet is connected together on site with sump pallet connectors to form a single storage surface





GW 1, <u>fire-galvanized</u>, Article no. P21-1100-A

GW 2, <u>fire-galvanized</u>, Article no. P21-1101-A



Particularly large sump capacities and generously dimensioned storage surfaces!

GW 3, <u>fire-galvanized</u>, Article no. P21-1102-A, with optional drive-on ramp

Model	<b>GW</b> 1	GW 2	GW 3	GW 4	GW 6
External dimensions W x D x H (mm)	1066 x 2066 x 315	2066 x 2066 x 315	3066 x 2066 x 315	4132 x 2066 x 315	6132 x 2066 x 315
Sump capacity (l)	300	660	1000	2 x 660	2 x 1000
Max. load (kg/m²)	1000	1000	1000	1000	1000
Weight (kg)	145	270	400	550	810
No. of individual sump pallets	1	1	1	2	2
No. of sump pallet connectors	-	-	-	1	1
Ground clearance (mm)	100	100	100	100	100
Article no., fire-galvanized	P21-1100-A	P21-1101-A	P21-1102-A	P21-1103-A	P21-1105-A

#### Accessory

Drive-on ramp for drum carts, W x D x H (mm) = 1200 x 1000 x 315, galvanized sheet steel

Article no. P21-1110-A



INDIVIDUAL ROOM LININGS ACCORDING TO LOCAL CONDITIONS











# STAINLESS STEEL SUMP PALLETS

#### For the storage of water-endangering and flammable liquids

- Base sump tray according to WHG Ü-sign according to StawaR
- Made from stainless steel 1.4301, therefore ideally suitable for storing acids and alkalis
- Support levels with either fire-galvanized or stainless steel grids
- Ground clearance 100 mm for fork-lift transport
- Stainless steel sumps are particularly suitable for use in the electroplating, chemical and food industries.

Models CW2 and CW4 are particularly suitable for storing 200 liter drums or small containers.



Article no. P69-3002-A



Article no. P69-3004-A

Models KTC-OS and KTC-ZW are particularly suitable for storing KTCs / IBCs.





Article no. P69-3001-A



Article no. P69-3003-A

Model	CW2-VA	CW4-VA	KTC-OS-VA	KTC-ZW-VA
Dimensions W x D x H (mm)	1250 x 820 x 340	1325 x 1320 x 250	1300 x 1360 x 790	2680 x 1300 x 480
Sump capacity (l)	210	210	1000	1000
Max. load (kg/m²)	500	1000	1500	1500
Capacity	2 x 200 liter drum	4 x 200 liter drum	1 KTC/IBC	2 KTC/IBC
Article no., with fire-galvanized grid	P69-3001-A	P69-3002-A	P69-3003-A	P69-3004-A
Article no., with stainless steel grid	P69-3011-A	P69-3012-A	P69-3013-A	P69-3014-A



1.2. PE sumps ...

Load tests on PE sumps page 32



General Technical Approval

PE sump trays for storing small containers and canisters page 33



PE sump trays for storing small containers, canisters, 60- resp. 120 liter drums page 34



PE floor safety elements page 35



PE sumps for storing 200 liter drums page 36-37



PE drum stands page 38



Mobile PE sumps page 39



PE sumps for KTC / IBC storage page 40-41



Rack base sumps made from PE for pallet racks

page 42



PE environmental cabinets page 43



PE station for hazardous substances for drums page 44



PE station for hazardous substances for KTC/IBC

page 45

# LOAD TESTS ON PE SUMPS

# Load tests on rotationally molded polyethylene sumps for achieving official constructional approval

A prerequirement for obtaining a general constructional approval from DIBt Berlin has been a successfully completed load tests.

The LACONT PE sumps have been tested according to the latest specifications and requirements of DIBt Berlin by an officially certified testing, monitoring and certification institute (test laboratory accredited by DAP - Deutsche Akreditierungssystem Prüfwesen).



PE-KT-2 under a test load of 16.000 kg

Deformation tests and, above all, load tests were carried out on sumps filled with water. The load tests have successfully been conducted with a load 4-fold compared to the normal operating load.





PE-KT-1S under a test load of 8.000 kg



PE-KT-1 under a test load of 8.000 kg



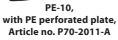
General Technical

# PE SUMP TRAYS FOR STORING SMALL CONTAINERS AND CANISTERS

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Designed for placing flat on the floor, on euro-pallets or worktables and benches
- PE perforated plate
- Available without PE perforated plate for direct storage of containers







PE-20, with PE perforated plate, Article no. P70-2001-A



PE-20, without PE perforated plate, Article no. P70-2002-A



PE-30, with PE perforated plate, Article no. P70-2003-A



with PE perforated plate, Article no. P70-2005-A



PE-40, without PE perforated plate, Article no. P70-2006-A

Model	PE-10	PE-20	PE-30	PE-40
External dimensions W x D x H (mm	395 x 300 x 145	600 x 400 x 155	805 x 405 x 155	800 x 600 x 155
Sump capacity (l)	10	20	30	40
Max. load (kg)	50	50	50	100
Article no., without PE grid	P70-2012-A	P70-2002-A	P70-2004-A	P70-2006-A
Article no., with PE grid	P70-2011-A	P70-2001-A	P70-2003-A	P70-2005-A



# PE SUMP TRAYS FOR STORING SMALL CONTAINERS, CANISTERS, 60- AND 120 LITER DRUMS

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Designed for placing on the floor, on euro-pallets or worktables and benches; PE-60/F with ground clearance for internal transport
- PE perforated plate
- Available without PE grid for direct storage of containers



PE-60, with PE perforated plate, Article no. P70-2007-A

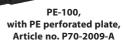


PE-60/F, with ground clearance with PE perforated plate, Article no. P70-2013-A



PE-200-6, without PE perforated plate, Article no. P70-2028-A



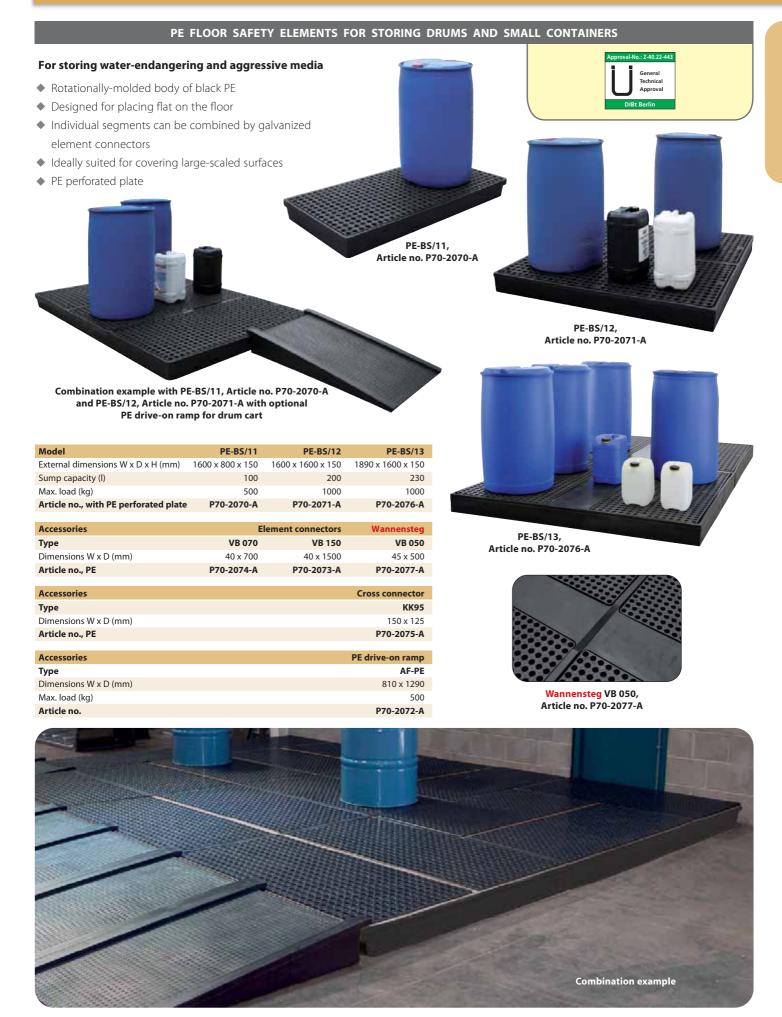




PE-200-6, with PE perforated plate, Article no. P70-2029-A

Model	PE-60	PE-60/F	PE-100	PE-200-6
External dimensions W x D x H (mm)	1000 x 600 x 175	1000 x 600 x 265	1200 x 800 x 175	1200 x 800 x 375
Sump capacity (l)	60	60	100	225
Max. load (kg)	200	200	200	800
Article no., without PE perforated plate	P70-2008-A	P70-2014-A	P70-2010-A	P70-2028-A
Article no., with PE perforated plate	P70-2007-A	P70-2013-A	P70-2009-A	P70-2029-A







# PE SUMPS FOR STORING 200 LITER DRUMS

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs ensure high load values
- Ground clearance for internal transport
- PE perforated plate





PE-200-1, with PE perforated plate, Article no. P70-2020-A



PE-200-2, with PE perforated plate, Article no. P70-2021-A



PE-200-3, with PE perforated plate, Article no. P70-2026-A



with PE perforated plate, Article no. P70-2022-A



PE-200-4L, with PE perforated plate, Article no. P70-2023-A

Model	PE-200-1	PE-200-2	PE-200-4	PE-200-3	PE-200-4L
External dimensions W x D x H (mm)	1000 x 680 x 600	1300 x 750 x 440	1380 x 1300 x 280	1380 x 1290 x 480	2446 x 662 x 270
Sump capacity (l)	225	236	242	450	220
Capacity, 200 liter drums	1	2	4	4	4
Max. load (kg)	250	500	1000	1000	1000
Article no., with PE perforated plate	P70-2020-A	P70-2021-A	P70-2022-A	P70-2026-A	P70-2023-A

General Technica



#### PE SUMPS FOR STORING 200 LITER DRUMS

#### For storing water-endangering and aggressive media

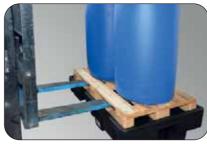
- Rotationally-molded body of black PE
- Circumferential stabilizing ribs ensure high load values
- Ground clearance for internal transport
- ◆ Available with PE perforated plate or without PE perforated plate for placing directly on euro-pallets



PE-200-5, with PE perforated plate, Article no. P70-2025-A



Article no. P70-2024-A



Safe positioning of the Euro pallet



Side ribs ensure that euro-pallets cannot slip



PE-200-3, Article no. P70-2026-A, with FB 2-Combi, Article no. P70-2033-A



with integrated filling stand, Article no. P70-2027-A

Model	PE-200-5	PE-200-AB
External dimensions W x D x H (mm)	1310 x 910 x 380	1375 x 1350 x 635
Sump capacity (l)	220	450
Capacity, 200 liter drums	2	2
Max. load (kg)	500	500
Article no., with PE perforated plate	P70-2025-A	P70-2027-A
Article no., without PE perforated plate	P70-2024-A	-



#### PE DRUM STANDS

#### For horizontal storage of steel drums (60 liter or 200 liter capacity)

 1-drum- and 2-drum models made of black PE



When not in use, the drum stand can be stacked to save space!



FB 1-Combi, with 60 liter drum, Article no. P70-2031-A



FB 2-Combi, Article no. P70-2033-A, e.g. 1x 200 liter drum and 1x 60 liter drum

Sump trays are not included in the scope of delivery!

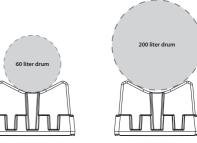


FB 2-Combi, Article no. P70-2033-A, e.g. 2x 200 liter drum

• 2-drum models made of yellow PE



Several drum stands can be connected to each other by simply clicking them into place on the underside of the drum stand.



FB 1-Combi are suitable for 60 or 200 liter drums



Article no. P70-7113-A



Article no. P70-7114-A

Model	FB 1-Combi	FB 2-Combi	VE-FB	FB 2/60	FB 2/200
External dimensions W x D x H (mm)	580 x 500 x 380	1160 x 500 x 380	Connecting set for	860 x 385 x 315	1245 x 585 x 390
Capacity	1 x 60 or 1 x 200 liter drum	2 x 60 or 2 x 200 liter drum	drum stand extension	2 x 60 liter drum	2 x 200 liter drum
Article no.	P70-2031-A	P70-2033-A	P70-2032-A	P70-7113-A	P70-7114-A



#### **MOBILE PE SUMPS**

#### For storing and transporting water-endangering and aggressive media

dh.

PE-60-cart

P70-7310-B P70-7311-B

60

2

200

1000 x 700 x 245

#### in 60 liter drums and small containers

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs
- Available with or without PE perforated plate
- PE construction with galvanized drawbar
- With 3 swiveling and 2 fixed castors
- (solid gum ø 100 mm)
- Max. load 200 kg

PE-60-cart, with PE perforated plate, Article no. P70-7311-B

Model

Sump capacity (I)

Max. load (kg)

Capacity, 60 liter drums\*





\* maximum capacity when used with PE perforated plate

External cart dimensions W x D x H (mm)

Article no., without PE perforated plate

Article no., with PE perforated plate

#### For storing and transporting water-endangering and aggressive media in 200 liter drums

- Rotationally-molded body of black PE ٠
- Circumferential stabilizing ribs ٠
- Available with or without PE perforated plate
- ٠ PE construction with steel pushbar
- With 3 swiveling and 2 fixed castors (solid gum ø 100 mm)
- Max. load 500 kg



without PE perforated plate, Article no. P70-7312-B

PE-200-6-car	t
1200 x 800 x 87	)
22	5
	2
500	C



with PE perforated plate, Article no. P70-7314-B

Model	PE-200-6-cart
External cart dimensions W x D x H (mm)	1200 x 800 x 870
Sump capacity (I)	225
Capacity, 200 liter drums*	2
Max. load (kg)	500
Article no., without PE perforated plate	Р70-7312-В
Article no., with PE perforated plate	Р70-7314-В

\* maximum capacity when used with PE perforated plate

**PE SUMPS** 



#### PE SUMPS FOR KTC/IBC STORAGE

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs ensure high load values
- Ground clearance for internal transport
- PE perforated plate



PE-KI-2, with 2 x PE perforated plate, Article no. P70-2041-A





PE-KT-1S, with PE perforated plate, Article no. P70-2043-A, with filling unit PE-AV-1S, Article no. P70-2037-A



without PE perforated plate, Article no. P70-2042-A

Model	PE-KT-1	PE-KT-1S	PE-KT-2
External dimensions W x D x H (mm)	1450 x 1450 x 1000	1700 x 1700 x 710	2450 x 1450 x 575
Sump capacity (l)	1000	1000	1000
Capacity, KTC / IBC	1	1	2
Max. load (kg)	2000	2000	4000
Article no., without PE perforated plate	P70-2042-A	-	-
Article no., with PE perforated plate	P70-2040-A	P70-2043-A	P70-2041-A
Suitable filling unit	PE-AV-1	PE-AV-1S	PE-AV-2
Article no.	P70-2035-A	P70-2037-A	P70-2036-A



#### PE SUMPS FOR KTC/IBC STORAGE

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs ensure high load values
- ◆ Ground clearance for internal transport
- Available with PE perforated plate or without PE perforated plate for placing directly of KTC/IBC



PE-KT-2S, without PE perforated plate, Article no. P70-2044-A, with filling unit PE-AV-2, Article no. P70-2036-A







PE-KT-1, with PE perforated plate, Article no. P70-2040-A, with filling unit PE-AV-1, Article no. P70-2035-A

PE-KT-2S
2300 x 1360 x 575
1000
2
3000
P70-2044-A

Suitable filling unit	PE-AV-2
Article no.	P70-2036-A



Steel sump pallets for 1000 liter containers with filling stand can be found on page 27!



Filling unit for single station, PE-AV-1, Article no. P70-2035-A



Filling unit for double station, PE-AV-2, Article no. P70-2036-A



Filling unit for single station, PE-AV-1S, Article no. P70-2037-A

Model	PE-AV-1	PE-AV-2	PE-AV-1S
External dimensions W x D x H (mm)	640 x 590 x 1065	640 x 590 x 665	640 x 590 x 790
Article no.	P70-2035-A	P70-2036-A	P70-2037-A

# **RACK BASE SUMPS FOR PALLET RACKS**



General Technical

ova

#### RACK BASE SUMPS MADE FROM PE FOR PALLET RACKS

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs
- Ground clearance for internal transport
- With the PE-B 13.33 type, the IBC containers can be placed directly on the shelf bottom tray

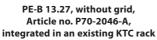
Our complete range of rack base sumps for pallet racks please

see from page 62!



PE-B 13.33, without grid, Article no. P70-2047-A







PE-B 13.22, without grid, Article no. P70-2045-A, integrated in an existing pallet rack

#### Rack sump pallet without grid support

for unit width (mm)	2200	2700	3300
Model	PE-B 13.22	PE-B 13.27	PE-B 13.33
Dimensions W x D x H (mm)	2165 x 1300 x 575	2665 x 1300 x 500	3255 x 1340 x 470
Sump capacity (I)	1000	1000	1000
Weight (kg)	52	62	73
Article no., without grid	P70-2045-A	P70-2046-A	P70-2047-A



#### **PE ENVIRONMENTAL CABINETS**

#### For the storage of water-endangering and aggressive media in small containers indoors

- Double door PE cabinet, body white, doors red
- Cabinet body rotationally-molded in one piece, therefore particularly stable construction
- Doors with cylinder lock to prevent unauthorized access, as per TRGS 526 / DGUV
- With PE base sump and 3 x V2A steel shelves
- Load capacity per shelf level 50 kg
- With ground clearance



chemicals and poisons cabinets

Also suitable for storing acids and alkalis!



Model	SLS 1835-PE
External dimensions W x D x H (mm)	1040 x 510 x 1835
Internal dimensions W x D x H (mm)	820 x 440 x 1490
Sump capacity (l)	40
Article no., doors red	P70-7207-A

SLS 1835-PE, Article no. P70-7207-A





Our new chemicals and poisons cabinets with sliding doors can be found on page 77!

# **PE STATION FOR HAZARDOUS SUBSTANCES**

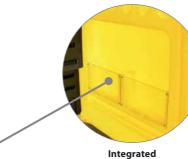


#### PE STATION FOR DRUMS

#### For the storage of water-endangering and aggressive

#### media indoors and outdoors

- Rotationally-molded PE-construction yellow, with black PE-sump tray
- Circumferential stabilizing ribs
- Ground clearance for internal transport
- PE perforated plate
- Weather protection with black PE louvre-door, lockable with padlock on customer side
- Document tray in the side wall as standard
- Sump trays with general technical approval DIBt Berlin
- Delivered as a kit for easy self-assembly on site



document storage





PE-ST-2, Article no. P70-2052-A



Article no. P70-2052-A, with optional shelf set



Safety stoerage depots for 200 liter drums can be found on page 146!



Article no. P70-2053-A

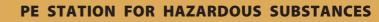


Article no. P70-2054-A

Model	PE-ST-2	PE-ST-4	PE-ST-45
External dimensions W x D x H (mm)	1500 x 1100 x 2110	1560 x 1790 x 2110	1560 x 1790 x 2110
Internal dimensions W x D x H (mm)	1220 x 750 x 1330	1220 x 1380 x 1510	1220 x 1380 x 1330
Sump capacity (I)	236	242	450
Capacity, 200 liter drums	2 directly on PE perforated plate	4 directly on PE perforated plate	4 directly on PE perforated plate
	or euro-pallet	or chemical pallet	or chemical pallet
Max. load (kg)	500	1000	1000
Article no., with PE perforated plate	P70-2052-A	P70-2053-A	P70-2054-A

#### Accessory

Shelf set for storing small containers or canisters with 2 height-adjustable grid shelves, W x D x H (mm) = 1060 x 635 x 1150, max. load per shelf 200 kg Article no.





#### PE STATION FOR KTC/IBC

#### For the storage of water-endangering and aggressive media indoors and outdoors

- Rotationally-molded PE-construction yellow, with black PE-sump tray
- Circumferential stabilizing ribs
- Ground clearance for internal transport
- PE perforated plate
- Double wing door lockable
- Sump trays with general technical approval DIBt Berlin
- Delivered as a kit for easy self-assembly on site







Safety storehouses for KTC / IBC can be found on page 146/147!



PE-ST-KT, Article no. P70-2055-A, with double wing door lockable



Article no. P70-2055-A



PE-ST-KT, Article no. P70-2055-A, with optional drum pallet

Model	PE-ST-KT
External dimensions W x D x H (mm)	1770 x 1750 x 2260
Internal dimensions W x D x H (mm)	1450 x 1480 x 1320
Sump capacity (I)	1000
Capacity, KTC / IBC	1
Capacity, 200 liter drum vertical	4
Capacity, 200 liter drum horizontal*	2
Max. load (kg)	2000
Article no., with PE perforated plate	P70-2055-A

\* possible only in combination with a drum pallet, Article no. R67-1107-A

#### **PRACTICAL INFORMATION 3**

#### 1. Important laws and regulations

Shortcut	Law / Regulation	MVV TB Nr. C2.15.12
ADR	Regulations for the transport of dangerous goods	steel troughs guidelines
ASR	Guideline for workplaces	TüV-Nord
AwSV	Regulation on facilities handling water-endangering substances	systems
BetrSichV	Regulation for industrial safety	DIBt Berlin
BlmSchG	Federal Immission Control Act	
BlmSchV	Federal Immission Control Ordinance (e.g. 4. BImSchV, 12. BImSchV)	
ChemG	Chemicals Act	
CLP	Regulation on the classification, labeling and packaging of substances and mixtures	
DGUV	German Social Accident Insurance	
GefStoffV	Ordinance of Hazardous Substances	
LBauO	Construction regulations of the countries	
LöRüRL	Fire water-containment guidelines	TOV NORD
REACH	Registration, evaluation, authorization and restriction of chemical substances	To State
StawaR	Steel trough guidelines	Stephotrich pach w
TRBS	Technical rules for operational safety	NORD Systems GmbH 8 OF
TRGS	Technical Regulation for hazardous substances (f.e. TRGS 509, 510)	
TRwS	Technical Rule for water-endangering substances	
WHG	German Water Management Act	

### 2. Specialized company

Facilities for the storage of water-endangering substances can only be manufactured and installed by specialized manufacturer in accordance with WHG. For the production a manufacturer qualification according to DIN EN 1090-2 EXC2 (formerly DIN 18800-7 Class C) is necessary.



#### 3. Water-endangering liquids

Indication	Hazard classes
very hazardous (severely)	WGK 3
hazardous	WGK 2
slightly hazardous	WGK 1

#### 4. Sump capacity

The sump device has to collect 10% of the total media stored above, but at least the contents of the largest stored container. In water protection areas 100% of the stored media have to be collected, assuming that storage is permitted.

#### 5. Approvals

Existing type tests are replaced by a declaration of conformity (UHP) of the manufacturer; collection systems with a sump capacity up to 1000 liters have to be manufactured according to the steel trough guidelines (StawaR). Beyond that general technical approvals, general type approvals or European technical evaluations are granted by DIBT for products which do not correspond to the steel trough guidelines and for collection systems made from plastic.

#### 6. CLP and GHS

With the regulation (EC) No. 1272/2008 a common European labeling system based on the Global Harmonized System (GHS) has been introduced. The CLP / GHS is mandatory since 01.06.2015 and to be applied for all substances.

#### 7. REACH

The regulation (EC) No 1907/2006 of 18.12.2006 is directly related to CLP and is among others, intended for the registration and evaluation of chemical substances. REACH collects data for health and safety risks of chemical substances as a basis for e.g. safety data sheets, risk assessments.

# TABLE OF CONTENTS - SHELVING SYSTEMS FOR HAZARDOUS SUBSTANCES

# 2. Shelving systems for hazardous substances ...



Hazardous substances shelving units for small containers page 48-55



Our steel sumps are available in our standard color RAL 5015 - sky blue (if not specified separately)





Filling stations for 60 liter drums page 56



Pallet racks for use in practice page 57



Stacking racks with base sumps page 58-59



Drum racks page 60-61



Rack base sumps sheet steel / PE and suspension sumps for pallet racks

page 62-65



Hazardous substances pallet racks with sumps page 66-69



Water protection compartment containers indoors

page 70



#### SHELVING UNITS FOR WATER-ENDANGERING SUBSTANCES IN SMALL CONTAINERS

- For the storage of water-endangering substances with sump tray shelves on each storage level
- 2 different combinable shelf widths (1000 and 1300 mm) allow optimal utilisation of existing storage space
- Mixture of basic and extension units allows extension as required

#### Fittings:

- All shelving parts and sump tray shelves galvanized
- Base sump tray according to WHG Ü-sign according to StawaR
- Height-adjustable shelves at intervals of 25 mm
- Max. load per storage level 200 kg with uniformly distributed load
- Max. unit load 1200 kg
- Stable construction by reinforced struts
- Dismounted delivery for easy self-assembly



KG-GR 130 / 5W, basic unit, Article no. R71-2103-D and KG-GR 100 / 5W, extension unit, Article no. R71-2102-D





KG-GR 100 / 4W, Article no. R71-2181-D



Model	KG-GR 100 / 4W	KG-GR 100 / 5W	KG-GR 130 / 4W	KG-GR 130 / 5W
External dimensions W x D x H (mm)	1060 x 635 x 2000	1060 x 635 x 2000	1360 x 635 x 2000	1360 x 635 x 2000
Lowest storage level fittings	1 x base sump tray, galvanized			
Other storage level fittings	3 x sump tray shelves, galvanized	4 x sump tray shelves, galvanized	3 x sump tray shelves, galvanized	4 x sump tray shelves, galvanized
Sump capacity (l)	4 x 30	5 x 30	4 x 35	5 x 35
Article no., basic unit	R71-2181-D	R71-2101-D	R71-2183-D	R71-2103-D
External dimensions, extension unit W x D x H (m	nm) 1010 x 635 x 2000	1010 x 635 x 2000	1310 x 635 x 2000	1310 x 635 x 2000
Article no., extension unit	R71-2182-D	R71-2102-D	R71-2184-D	R71-2104-D
Accessory	Article no.	Article no.	Article no.	Article no.
Additional sump tray shelf as storage level	R71-2108-D	R71-2108-D	R71-2109-D	R71-2109-D



#### SHELVING UNITS FOR FLAMMABLE LIQUIDS IN SMALL CONTAINERS

- For the storage of flammable liquids With 1 x sump tray shelf as lowest storage level and 3 resp. 4 x galvanized grid-type shelves
- 2 different combinable shelf widths (1000 and 1300 mm) allow optimal utilisation of existing storage space
- Mixture of basic and extension units allows extension as required

#### Fittings:

- All shelving parts, sump tray shelves and grid-type shelves galvanized
- Base sump tray according to WHG Ü-sign according to StawaR
- Height-adjustable shelves at intervals of 25 mm
- ◆ Max. load per storage level 200 kg with uniformly distributed load
- Aax. unit load 1200 kg
- Stable construction by reinforced struts
- Dismounted delivery for easy self-assembly



KG-GR 100 / 5G, basic unit, Article no. R71-2110-D and KG-GR 100 / 5G, extension unit, Article no. R71-2111-D





KG-GR 100 / 4G, Article no. R71-2190-D



Hazardous substances cabinets can be found from page 111!

Model	KG-GR 100 / 4G	KG-GR 100 / 5G	KG-GR 130 / 4G	KG-GR 130 / 5G
External dimensions W x D x H (mm)	1060 x 635 x 2000	1060 x 635 x 2000	1360 x 635 x 2000	1360 x 635 x 2000
Lowest storage level fittings	1 x base sump tray, galvanized			
Other storage level fittings	3 x grid shelves, galvanized	4 x grid shelves, galvanized	3 x grid shelves, galvanized	4 x grid shelves, galvanized
Sump capacity (l)	1 x 30	1 x 30	1 x 35	1 x 35
Article no., basic unit	R71-2190-D	R71-2110-D	R71-2192-D	R71-2112-D
External dimensions, extension unit W x D x H (m	im) 1010 x 635 x 2000	1010 x 635 x 2000	1310 x 635 x 2000	1310 x 635 x 2000
Article no., extension unit	R71-2191-D	R71-2111-D	R71-2193-D	R71-2113-D
Accessory	Article no.	Article no.	Article no.	Article no.
Additional grid shelf as storage level	R71-2118-D	R71-2118-D	R71-2119-D	R71-2119-D



#### SHELVING UNITS FOR WATER-ENDANGERING AND AGGRESSIVE LIQUIDS IN SMALL CONTAINERS

- For the storage of water-endangering and aggressive liquids with 3 resp. 4 PE sump tray shelves on each storage level
- 2 different combinable shelf widths (1000 and 1300 mm) allow optimal utilisation of existing storage space
- Mixture of basic and extension units allows extension as required

#### Fittings:

- All shelving parts galvanized
- Sump tray shelves with PE insert
- Height-adjustable shelves at intervals of 25 mm
- Max. load per storage level 200 kg with uniformly distributed load
- Max. unit load 1200 kg
- Stable construction by reinforced struts
- Dismounted delivery for easy self-assembly



KG-GR 130 / 5WPE, basic unit, Article no. R71-2122-D and KG-GR 130 / 5WPE, extension unit, Article no. R71-2123-D



KG-GR 100 / 4WPE, basic unit, Article no. R71-2124-A and KG-GR 100 / 4WPE, extension unit, Article no. R71-2125-A





Model	KG-GR 100 / 4WPE	KG-GR 100 / 5WPE	KG-GR 130 / 4WPE	KG-GR 130 / 5WPE
External dimensions W x D x H (mm)	1060 x 635 x 2000	1060 x 635 x 2000	1360 x 635 x 2000	1360 x 635 x 2000
Lowest storage level fittings	1 x PE base sump tray			
Other storage level fittings	3 x PE sump tray shelves	4 x PE sump tray shelves	3 x PE sump tray shelves	4 x PE sump tray shelves
Sump capacity (l)	4 x 30	5 x 30	4 x 35	5 x 35
Article no., basic unit	R71-2124-D	R71-2120-D	R71-2126-D	R71-2122-D
External dimensions, extension unit W x D x H (mm)	1010 x 635 x 2000	1010 x 635 x 2000	1310 x 635 x 2000	1310 x 635 x 2000
Article no., extension unit	R71-2125-D	R71-2121-D	R71-2127-D	R71-2123-D
Accessory	Article no.	Article no.	Article no.	Article no.
Additional PE sump tray shelf as storage level	R71-2128-D	R71-2128-D	R71-2129-D	R71-2129-D



#### SHELVING UNITS FOR WATER-ENDANGERING AND AGGRESSIVE LIQUIDS IN SMALL CONTAINERS

- For the storage of water-endangering and aggressive liquids with 1 x PE sump tray shelf as lowest storage level and 3 resp. 4 x galvanized or PE grid shelves
- 2 different combinable shelf widths (1000 and 1300 mm) allow optimal utilisation of existing storage space
- Mixture of basic and extension units allows extension as required

#### Fittings:

- All shelving parts galvanized
- Tray-shaped shelves with PE insert
- 3 resp. 4 x galvanized or PE grid shelves
- Height-adjustable shelves at intervals of 25 mm
- Max. load per storage level with uniformly distributed load: with galvanized grid shelf 200 kg, with PE grid shelf 130 kg
- Max. unit load 1200 kg
- Stable construction by reinforced struts
- Dismounted delivery for easy self-assembly



KG-GR 130 5GPE, basic unit, Article no. R71-2132-D and KG-GR 130 5PG, extension unit, Article no. R71-2143-D





Model	KG-GR 100 / 4GPE	KG-GR 100 / 5GPE	KG-GR 130 / 4GPE	KG-GR 130 / 5GPE
External dimensions W x D x H (mm)	1060 x 635 x 2000	1060 x 635 x 2000	1360 x 635 x 2000	1360 x 635 x 2000
Lowest storage level fittings	1 x PE base sump tray			
Other storage level fittings	3 x galvanized grid shelves	4 x galvanized grid shelves	3 x galvanized grid shelves	4 x galvanized grid shelves
Sump capacity (l)	1 x 30	1 x 30	1 x 35	1 x 35
Article no., basic unit	R71-2134-D	R71-2130-D	R71-2136-D	R71-2132-D
External dimensions, extension unit W x D x H (mm)	1010 x 635 x 2000	1010 x 635 x 2000	1310 x 635 x 2000	1310 x 635 x 2000
Article no., extension unit	R71-2135-D	R71-2131-D	R71-2137-D	R71-2133-D
Accessory	Article no.	Article no.	Article no.	Article no.
Additional galvanized grid shelf	R71-2118-D	R71-2118-D	R71-2119-D	R71-2119-D
Model	KG-GR 100 / 4PG	KG-GR 100 / 5PG	KG-GR 130 / 4PG	KG-GR 130 / 5PG
External dimensions W x D x H (mm)	1060 x 635 x 2000	1060 x 635 x 2000	1360 x 635 x 2000	1360 x 635 x 2000
Lowest storage level fittings	1 x PE base sump tray			
Other storage level fittings	3 x PE grid shelves	4 x PE grid shelves	3 x PE grid shelves	4 x PE grid shelves
Sump capacity (l)	1 x 30	1 x 30	1 x 35	1 x 35
Article no., basic unit	R71-2144-D	R71-2140-D	R71-2146-D	R71-2142-D
External dimensions, extension unit W x D x H (mm)	1010 x 635 x 2000	1010 x 635 x 2000	1310 x 635 x 2000	1310 x 635 x 2000
Article no., extension unit	R71-2145-D	R71-2141-D	R71-2147-D	R71-2143-D
Accessory	Article no.	Article no.	Article no.	Article no.

#### FOR THE STORAGE OF HAZARDOUS SUBSTANCES IN SMALL CONTAINERS

Our hazardous substances shelving units on pages 48 - 51 can be supplied in many different versions:

- Powder-coated support profiles
- Various shelving heights (e.g. 2500 mm)
- Various shelving widths (e.g. 700 mm)
- Various shelving depths (e.g. 400, 500 or 800 mm)
- Sump tray shelves with higher sump capacity
- Various base sump tray sizes

We can supply "Your hazardous substances shelving" according to your particular space requirements. Please make use of our planning service!

#### **Combinability:**

All the hazardous substances shelving units on pages 48 - 51 and 56 can be combined at will. This means that the available storage space can be equipped with shelving that exactly matches the substances to be stored with respect to container sizes and amounts of substances. The modular construction with basic and extension units means that the hazardous substances shelving can be extended at any time.







#### STAINLESS STEEL SHELVING UNITS FOR WATER-ENDANGERING AND AGGRESSIVE LIQUIDS IN SMALL CONTAINERS

- For the storage of water-endangering, flammable and aggressive liquids in small containers
- Especially suitable for use in laboratory and hospital sector
- Available in 2 different shelf depths (300 + 500 mm)
- Quick and easy installation

#### Fittings:

- 1 x base tray in the lowest storage level and 3 x slotted shelves
- Base sump tray according to WHG Ü-sign according to StawaR
- All shelving parts and base sump tray made from stainless steel 1.4301
- Height-adjustable slotted shelves at intervals of 25 mm
- Max. field load 1000 kg
- Stable construction by reinforced struts
- Dismounted delivery for easy self-assembly



KG-GR 600-500 VA, basic unit, Article no. R71-3120-A





KG-GR 1000-500 VA, basic unit, Article no. R71-3122-A



KG-GR 1000-500 VA, basic unit, Article no. R71-3122-A and KG-GR 1000-500 VA, extension unit, Article no. R71-3123-A



KG-GR 1300-500 VA, basic unit, Article no. R71-3124-A

Model	KG-GR 600-300 VA	KG-GR 1000-300 VA	KG-GR 1300-300 VA	KG-GR 600-500 VA	KG-GR 1000-500 VA	KG-GR 1300-500 VA
External dimensions W x D x H (mm)	660 x 335 x 1750	1060 x 335 x 1750	1360 x 335 x 1750	660 x 535 x 1750	1060 x 535 x 1750	1360 x 535 x 1750
Sump capacity (l)	1 x 20	1 x 30	1 x 35	1 x 20	1 x 30	1 x 35
Max. field load (kg)	150	150	100	150	150	100
Article no., basic unit	R71-3110-A	R71-3112-A	R71-3114-A	R71-3120-A	R71-3122-A	R71-3124-A
Article no., extension unit	R71-3111-A	R71-3113-A	R71-3115-A	R71-3121-A	R71-3123-A	R71-3125-A
Accessory	Article no.	Article no.	Article no.	Article no.	Article no.	Article no.
Additional slotted shelf	R71-3130-A	R71-3131-A	R71-3132-A	R71-3133-A	R71-3134-A	R71-3135-A





#### HAZARDOUS SUBSTANCES SHELVING UNITS FOR SMALL CONTAINERS WITH SUMP PALLET

- Base sump tray according to WHG Ü-sign according to StawaR
- Large sump capacity by combination of sump pallet and hazardous substances shelving
- Galvanized grid shelves
- Dismounted delivery with instructions for easy self-assembly

#### Shelf fittings:

- Galvanized
- Height-adjustable shelves at intervals of 25 mm
- Max. load per storage level 200 kg\*

\* with uniformly distributed load





- Painted in RAL 5015 sky blue or fire-galvanized, dimensions please see table below
- Sump capacity 210 liters
- Safe liquid transfer with projecting grid in front of shelves
- ♦ Ground clearance 100 mm



sump pallet <u>fire-galvanized</u>, Article no. R71-1061-C ldeally suitable for storing agricultural pesticides!



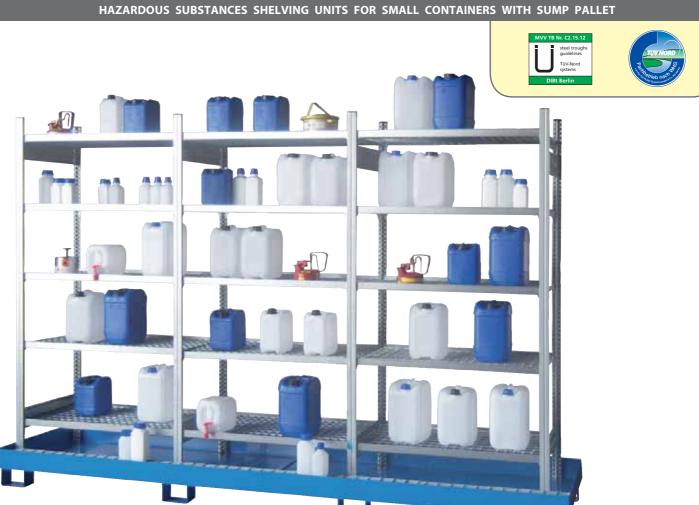
GR2-5GE, sump pallet painted, Article no. R71-2081-C



sump pallet <u>fire-galvanized</u>, Article no. R71-1080-C

Model	GR1-4GE	GR1-5GE	GR2-4GE	GR2-5GE
Dimensions W x D x H (mm)	1060 x 635 x 2100	1060 x 635 x 2100	2085 x 635 x 2100	2085 x 635 x 2100
Sump pallet dimensions W x D x H (mm)	1250 x 820 x 340	1250 x 820 x 340	2400 x 820 x 240	2400 x 820 x 240
Fittings	4 x grid shelves	5 x grid shelves	2 x 4 grid shelves	2 x 5 grid shelves
Sump capacity (l)	210	210	210	210
Article no., sump pallet painted	R71-2060-C	R71-2061-C	R71-2080-C	R71-2081-C
Article no., sump pallet fire-galvanized	R71-1060-C	R71-1061-C	R71-1080-C	R71-1081-C





Hazardous substances shelvings are available in several versions:

- Various shelving heights
- Various shelving widths
- Various shelving depths
- Various sump pallet sizes





Model	GR3-4GE	GR3-5GE
Dimensions W x D x H (mm)	3095 x 635 x 2100	3095 x 635 x 2100
Sump pallet dimensions W x D x H (mm)	3200 x 820 x 215	3200 x 820 x 215
Fittings	3 x 4 grid shelves	3 x 5 grid shelves
Sump capacity (I)	210	210
Article no., sump pallet painted	R71-2090-C	R71-2091-C
Article no., sump pallet fire-galvanized	R71-1090-C	R71-1091-C

GR3-5GE, sump pallet painted, Article no. R71-2091-C 

#### FILLING STATIONS FOR 60 LITER DRUMS WITH SUMP PALLET

The use of 60 liter drums when handling hazardous substances on a day-to-day basis is widespread. The 60 liter filling stations have been developed in order to store these drums and fill off liquids from them in safety.

- Sump pallet made from 3 mm galvanized sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Sump capacity 60 liters
- Ground clearance 40 mm
- Horizontal storage of 60 liter drums
- Grid shelf for small container storage
- Mixture of basic and extension units allows extension as required
- Plug-in connections for high stability
- Height-adjustable storage levels
- Max. load per crossbeam pair 200 kg
- Max. load per unit 600 kg
- Galvanized for high corrosion protection
- Fixed drum supports as standard
- Assembly instructions provided for quick assembly





AR 1150 / 660, Article no. R74-1050-A, with optional can support



AR 2000 / 660 GR, Article no. R74-1056-A, with optional can support



AR 1150 / 360 GR, Article no. R74-1052-A

Model	AR 1150 / 660	AR 1150 / 360 GR	AR 2000 / 960	AR 2000 / 660 GR
External dimensions W x D x H (mm)	1360 x 635 x 1150	1360 x 635 x 1150	1360 x 635 x 2000	1360 x 635 x 2000
Sump pallet dimensions W x D x H (mm)	1240 x 840 x 150	1240 x 840 x 150	1240 x 840 x 150	1240 x 840 x 150
Sump capacity (l)	60	60	60	60
Capacity	6 x 60 liter drums	3 x 60 liter drums and	9 x 60 liter drums	6 x 60 liter drums and
		1 level for small containers		1 level for small containers
Article no. / basic unit	R74-1050-A	R74-1052-A	R74-1054-A	R74-1056-A
Article no. / extension unit	R74-1051-A	R74-1053-A	R74-1055-A	R74-1057-A

Accessories	Article no.
Additional storage level with fixed support for 3 x 60 liter drums	R74-1058-A
Additional grid storage level	R74-1059-A
Grid support level for sump pallet	R74-1060-A
Can support	R74-1061-A

# HAZARDOUS SUBSTANCES PALLET RACKS FOR USE IN PRACTICE





Hazardous substances pallet racks can be found from page 66 !









#### FILLING RACKS WITH SUMP PALLET



Placing a 200 liter drum horizontally on the top storage level is easier said than done. Using the fork tips of a fork-lift truck involves a high environmental risk and is therefore forbidden. The stacking rack is an officially approved solution that meets the practical requirements of day-to-day work.

#### It is done like this:

The fork-lift truck is used to lift up a rack. The empty drums are removed and replaced by full ones and the rack is replaced by the fork-lift truck.





Possible combination: WSP-2-OS with STR-1 or STR-3 WSP-4-OS with STR-2, STR-3, STR-G WSP-4L-OS with STR-1 or STR-3 WSP-8-OS with STR-2, STR-3, STR-G All water protection pallets are also available without stacking racks.

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG -Ü-sign according to StawaR
- Max. 3 stacking racks on top of one another
- ◆ All stacking racks except STR-1 can be combined at will
- Steel drums with a capacity of up to 220 liter can be stored
- The racks are protected against falling over by being anchored to one another and to the sump pallet
- Water protection pallets with removable fire-galvanized grid supports



WSP-4-OS with 2 x STR-2 stacking racks and can support



WSP-4-OS with STR-2+STR-3 stacking racks and can support



WSP-2-OS with 2 x STR-1 stacking racks and can support



WSP-8-OS with 1 x STR-G and 1 x STR-2 stacking racks and can support

Sump pallets / Water protection pallets					Stacking	racks		
Model	WSP-2-OS	WSP-4-OS	WSP-4L-OS	WSP-8-OS	STR-1	STR-2	STR-3	STR-G
Dimensions W x D (mm)	800 x 1400	1400 x 1280	2750 x 890	2750 x 1280	790 x 650	1390 x 650	1390 x 650	1390 x 1000
Height (mm)	340	260	260	220	790	790	790	790
Capacity (I)	2 x 220	4 x 220	4 x 220	8 x 220	1 x 200	2 x 200	3 x 50 / 60	small containers
Sump capacity (l)	220	220	220	220	-	-	-	-
Article no., fire-galvanized	P21-1402-A	P21-1403-A	P21-1404-A	P21-1405-A	R67-1103-A	R67-1104-A	R67-1105-A	R67-1106-A

Accessories	Can support	Rotating drum support
Article no.	Z50-1926-A	Z50-1925-B



#### FILLING RACKS WITH PUSH-IN SUMP TRAYS





E2 with STR-3 + STR-G stacking racks and can support

E2 with 2 x STR-G stacking racks

Simply safe, simply good. Four fork-lift tip openings mean that each rack can be safely picked up and put down with a fork-lift truck. Take off the empty drums, put on the new ones and return the rack to its position. All racks are anchored to prevent them falling over.

- Push-in base sump tray made from 3 mm sheet steel
- Push-in base sump tray according to WHG Ü-sign according to StawaR
- ◆ All stacking racks are fire-galvanized
- Base and push-in sumps fire-galvanized
- Push-in base sump, sump capacity 205 liters
- Push-in base sump without grid support



E2 with STR-G stacking rack



E2 with STR-2 + STR-G stacking racks and can support



E2 with 2 x STR-2 stacking racks and can support



E2 with STR-2 + STR-3 stacking racks and can support

Possible assembly			Possible as	sembly		
Model	Sump tray E1	STR-1	Sump tray E2	STR-2	STR-3	STR-G
Dimensions W x D (mm)	690 x 1200	790 x 650	1290 x 1200	1390 x 650	1390 x 650	1390 x 1000
Height (mm)	275	790	160	790	790	790
Capacity (I)	205	1 x 200	205	2 x 200	3 x 50 / 60	small containers
Article no., fire-galvanized	P67-1801-A	R67-1103-A	P67-1802-A	R67-1104-A	R67-1105-A	R67-1106-A

**DRUM RACKS** 



### DRUM RACKS

# For horizontal storage and filling off from various container sizes

Not only their safe storage but also proper filling off plays a great role with waterendangering substances.

The drum racks that have been specially developed for this purpose guarantee:

- Safety in accordance with the rules
- Practically tested construction
- Simple operation
- Flexible usability
- Assembly instructions provided for quick assembly



Article no. R74-1015-B, with optional can support



TüV-Nord

FR2-2236, Article no. R74-1010-B, with optional can support



FR2-2222, Article no. R74-1007-B, with optional can support



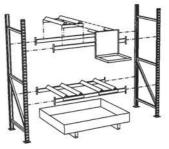
DRUM RACKS

- Sump pallet made from 3 mm sheet steel
- Sump pallet according to WHG Ü-sign according to StawaR
- Horizontal storage of 60 200 liter drums
- Small container storage also possible
- Basic and extension units can be combined at will
- Highly stable due to plug and screw connections
- Height-adjustable crossbeams
- Max. load per crossbeam pair 600 kg
- All frame components and crossbeams galvanized
- Fixed drum supports as standard

...........



Drum racks can also be extended at a later date





FR3-96, Article no. R74-1023-B, with optional can supports

Rotating drum support, Article no. Z50-1925-B

Model	FR2-2222	FR2-2236	FR2-3636	FR3-96		
External dimensions W x D x H (mm)	1507 x 800 x 2200					
Sump pallet dimensions W x D x H (mm)	1325 x 1320 x 250					
Sump capacity (l)	210	210	210	210		
Capacity, liter drums	4 x 200	2 x 200 / 3 x 60	6 x 60	9 x 60		
Fire-galvanized sump pallet without grid support						
Article no. / basic unit	R74-1006-B	R74-1010-B	R74-1014-B	R74-1022-B		
Article no. / extension unit	R74-1008-B	R74-1012-B	R74-1016-B	R74-1024-B		
Fire-galvanized sump pallet with grid support						
Article no. / basic unit	R74-1007-B	R74-1011-B	R74-1015-B	R74-1023-B		
Article no. / extension unit	R74-1009-B	R74-1013-B	R74-1017-B	R74-1025-B		

Accessories	Article no.
Rotating drum support with ball bearings, for clamping onto existing drum support, max. load 210 kg	Z50-1925-B
Can support	Z50-1926-B
Collision protection, with yellow / black safety painting and floor anchor	R23-3110-D
Additional grid storage level, with carrier bar	R74-1040-B



#### RACK BASE SUMPS FOR PALLET RACKS/DRUM STORAGE

#### For the storage of water-endangering and flammable liquids

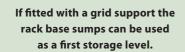
The storage of water-endangering and flammable substances in pallet racks is officially permitted only when these are equipped with an approved sump system.

This means that existing pallet racks can be rapidly and cheaply converted into an approved storage system for hazardous goods.

- Base sump tray made from 3 mm fire-galvanized sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Available with and without grid supports
- Max load 1000 kg / m<sup>2</sup>
- Ground clearance 100 mm



WSR-BG 13.27/360, Article no. R23-1902-F



Version with PE-insert

Rack sump pallet without grid support

for unit width (mm)	1800	2200	2700	2700	3300
Model	WSR-B 13.18/360	WSR-B 13.22/360	WSR-B 13.27/360	WSR-B 13.27/660	WSR-B 13.33/660
Dimensions W x D x H (mm)	1780 x 1300 x 322	2180 x 1300 x 292	2680 x 1300 x 267	2680 x 1300 x 357	3280 x 1300 x 322
Sump capacity (I)	360	360	360	660	660
Weight (kg)	101	114	138	155	172
Article no., fire-galvanized	R23-1801-F	R23-1807-F	R23-1802-F	R23-1808-F	R23-1803-F
Article no., PE-insert for aggressive media	R23-5611-F	R23-5617-F	R23-5612-F	R23-5618-F	R23-5613-F

#### Rack sump pallet with grid support

for unit width (mm)	1800	2200	2700	2700	3300
Model	WSR-BG 13.18/360	WSR-BG 13.22/360	WSR-BG 13.27/360	WSR-BG 13.27/660	WSR-BG 13.33/660
Dimensions W x D x H (mm)	1780 x 1300 x 340	2180 x 1300 x 310	2680 x 1300 x 285	2680 x 1300 x 375	3280 x 1300 x 345
Sump capacity (l)	360	360	360	660	660
Weight (kg)	172	200	244	260	302
Article no., fire-galvanized	R23-1901-F	R23-1907-F	R23-1902-F	R23-1908-F	R23-1903-F
Article no., PE-insert for aggressive media	R23-5621-F	R23-5627-F	R23-5622-F	R23-5628-F	R23-5603-F



TüV-No

#### RACK BASE SUMPS FOR PALLET RACKS/KTC STORAGE

#### For the storage of water-endangering and flammable liquids

- Base sump tray made from 3 mm **fire-galvanized** sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Available with and without grid supports
- Max. load 1500 kg / m<sup>2</sup>

1

Ground clearance 100 mm

If fitted with a grid support the rack base sumps can be used as a first storage level.



WSR-BG 13.22/1000, Article no. R23-1904-F, integrated in an existing KTC rack

Rack sump pallet without grid support

WSR-BG 13.22/1000, Article no. R23-1904-F



for unit width (mm)	1800	2200	2700	3300
Model	WSR-B 13.18/1000	WSR-B 13.22/1000	WSR-B 13.27/1000	WSR-B 13.33/1000
Dimensions W x D x H (mm)	1780 x 1300 x 622	2180 x 1300 x 542	2680 x 1300 x 462	3280 x 1300 x 402
Sump capacity (I)	1000	1000	1000	1000
Weight (kg)	143	164	174	189
Article no., fire-galvanized	R23-1809-F	R23-1804-F	R23-1805-F	R23-1806-F
Article no., PE-insert for aggressive media	R23-5619-F	R23-5614-F	R23-5615-F	R23-5616-F

#### Rack sump pallet with grid support

for unit width (mm)	1800	2200	2700	3300
Model	WSR-BG 13.18/1000	WSR-BG 13.22/1000	WSR-BG 13.27/1000	WSR-BG 13.33/1000
Dimensions W x D x H (mm)	1780 x 1300 x 640	2180 x 1300 x 560	2680 x 1300 x 480	3280 x 1300 x 420
Sump capacity (l)	1000	1000	1000	1000
Weight (kg)	259	304	359	394
Article no., fire-galvanized	R23-1909-F	R23-1904-F	R23-1905-F	R23-1906-F
Article no., PE-insert for aggressive media	R23-5619-F	R23-5614-F	R23-5615-F	R23-5616-F

# RACK BASE SUMPS FOR PALLET RACKS



General Technical

ova

#### RACK BASE SUMPS MADE FROM PE FOR PALLET RACKS

#### For storing water-endangering and aggressive media

- Rotationally-molded body of black PE
- Circumferential stabilizing ribs
- Ground clearance for internal transport
- With the PE-B 13.33 type, the IBC containers can be placed directly on the shelf bottom tray

Our complete range of PE sumps please see from page 31!



PE-B 13.33, without PE grid, Article no. P70-2047-A



PE-B 13.27, Article no. P70-2046-A, integrated in an existing KTC rack



PE-B 13.27, Article no. P70-2046-A, integrated in an existing pallet rack

#### Rack sump pallet without grid support

for unit width (mm)	2200	2700	3300
Model	PE-B 13.22	PE-B 13.27	PE-B 13.33
Dimensions W x D x H (mm)	2165 x 1300 x 575	2665 x 1300 x 500	3255 x 1340 x 470
Sump capacity (I)	1000	1000	1000
Weight (kg)	52	62	73
Article no., without PE grid	P70-2045-A	P70-2046-A	P70-2047-A



#### SUSPENSION SUMPS FOR PALLET RACKS

# For the storage of water-endangering and flammable liquids with flashpoint >55°C

Ideally suitable for rapidly and cheaply equipping existing pallet racks with sumps. The suspension sumps lie on the rack crossbeams and are prevented from falling by their construction.

- Base sump tray made from 3 mm fire-galvanized sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Sump capacity for drum storage, larger sump capacities on request
- With grid support
- Max. load 1000 kg / m<sup>2</sup>

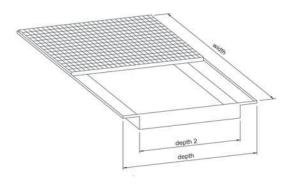


WSR-E 13.27/220, Article no. R23-1702-E, built into an existing pallet rack





WSR-E 13.33/220, Article no. R23-1703-E



WSR-E 13.33/220, Article no. R23-1703-E







# Suspension sumps for unit width (mm)

for unit width (mm)	1800	2200	2700	3300
Model	WSR-E 13.18/220	WSR-E 13.22/220	WSR-E 13.27/220	WSR-E 13.33/220
Dimensions W x D x H (mm)	1780 x 1300 x 198	2180 x 1300 x 173	2680 x 1300 x 158	3280 x 1300 x 148
Depth 2 (mm)	970	970	970	970
Sump capacity (l)	220	220	220	220
Weight (kg)	148	174	210	256
Article no., <u>fire-galvanized</u>	R23-1701-E	R23-1704-E	R23-1702-E	R23-1703-E
Article no., PE-insert for aggressive media	R23-5601-E	R23-5604-E	R23-5602-E	R23-5603-E



#### HAZARDOUS SUBSTANCES PALLET RACKS WITH SUMPS

#### For the storage of hazardous substances as barrelled goods on euro- or chemical pallets on 2 storage levels

By the combination of pallet racks with quality marks and rack base sumps in accordance with the Water Management Act (WHG) it is possible to obtain a flexible and favourably priced storage system that can be extended at any time.

#### Pallet rack fittings:

- "Quality mark RAL-RG 614/2 Pallet racks"
- Stands consist of cold-formed profiles, which are screwed on site with web bracingt
- Storage levels height-adjustable at intervals of 50 mm
- Support frame galvanized, longitudinal beams plastic coated RAL 2001 - red-orange

#### Rack base sump fittings:

- Base sump tray made from 3 mm sheet steel
- Base sump tray according to WHG Ü-sign according to StawaR
- Corrosion-protected by <u>fire-galvanizing</u>
- Ground clearance 100 mm

Load increase of more than 20% possible when combining several rack units. Please ask us!









G-PR 2.27/360, basic unit

By the additional use of grid supports it is also possible to store containers "without a pallet"!

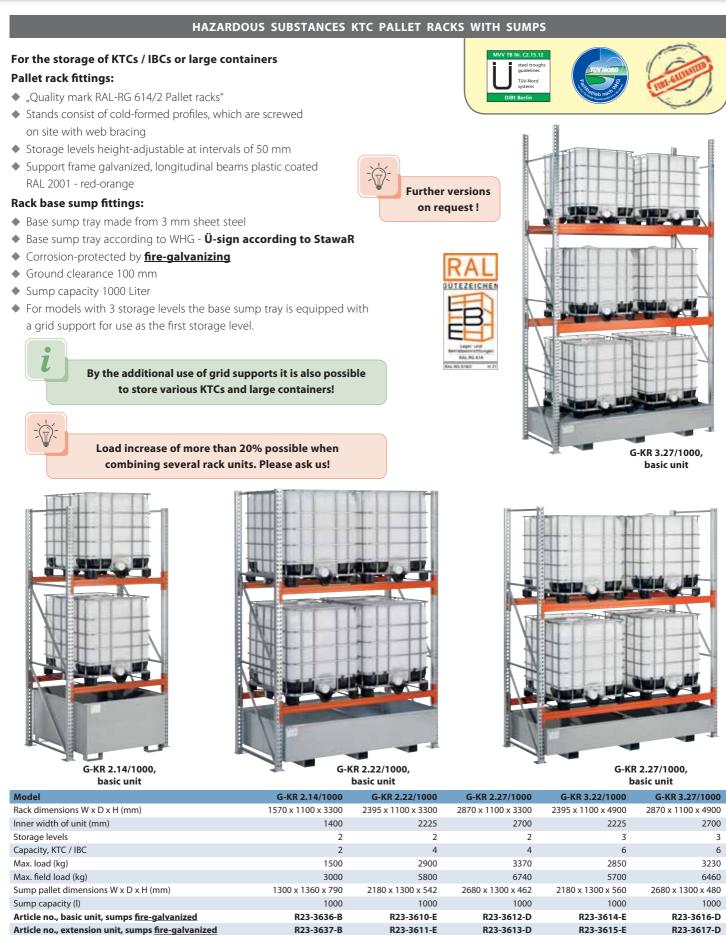
Model	G-PR 2.18/360	G-PR 2.22/360	G-PR 2.27/360
Rack dimensions W x D x H (mm)	1995 x 1100 x 2700	2395 x 1100 x 2700	2870 x 1100 x 2700
Inner width of unit (mm)	1825	2225	2700
Storage levels	2	2	2
Capacity, 200 liter drums on euro-pallets	8	8	12
Capacity, 200 liter drums on chemical pallets	8	8	16
Max. load (kg)	2160	2250	3370
Max. field load (kg)	4320	4500	6740
Sump pallet dimensions W x D x H (mm)	1780 x 1300 x 322	2180 x 1300 x 292	2680 x 1300 x 267
Sump capacity (I)	360	360	360
Article no., basic unit, sumps fire-galvanized	R23-3510-E	R23-3512-E	R23-3514-D
Article no., extension unit, sumps fire-galvanized	R23-3511-E	R23-3513-E	R23-3515-D
Accessories	Article no.	Article no.	Article no.
Push-through protection for 1 storage level	R23-3120-E	R23-3121-E	R23-3122-D
Grid support	R23-3100-B	R23-3101-B	R23-3102-B
Collision protection corner	R23-3110-D	R23-3110-D	R23-3110-D





# HAZARDOUS SUBSTANCES PALLET RACKS





#### HAZARDOUS SUBSTANCES PALLET RACKS WITH SUMPS



 Room or sumps exhaust systems; we can provide you with the optimal solution!





We can plan, supply and install "Your hazardous substances rack unit". The type and execution will be specially designed to suit your particular requirements. This means that we ensure optimal utilisation of space while taking all the legal regulations for the substances to be stored into consideration.

 Pallet rack unit with built-in sumps for hazardous substances on euro-pallets





- Pallet rack unit with built-in sumps in a completely galvanized version
- Special corrosion protection is possible on request (e.g. for the storage of aggressive media)
- We will be pleased to advise you!



Technica

#### STANDING DRUM STORAGE INDOORS

#### **STORAGE INDOORS:**

Water protection compartment containers are also suitable for the storage of hazardous substances indoors. Storage can take place both directly on the grid supports of the different levels and also on euro- or chemical pallets. The compact modular design allows an uncomplicated change of location in a very short time (e.g. by using a fork-lift truck or crane).





WSC-G-E.1-30, Article no. C22-5501-B



Water protection compartment containers outdoors can be found from page 158!

#### Excerpt from our range of supply:

Model	WSC-G-E.1-30	WSC-G-E.2-30	WSC-G-E.3-30	WSC-G-E.1-60	WSC-G-E.2-60	WSC-G-E.3-60
Number of levels	1	2	3	1	2	3
External dimensions W x D x H (mm)	3130 x 1390 x 830	3130 x 1390 x 2230	3130 x 1390 x 3630	6200 x 1390 x 830	6200 x 1390 x 2230	6240 x 1390 x 3630
Internal compartment						
dimensions W x D x H (mm)	3010 x 1300	3010 x 1300 x 1250	3010 x 1300 x 1250	3010 x 1300	3010 x 1300 x 1250	3010 x 1300 x 1250
Sump capacity (l)	650	650	650	2 x 650	2 x 650	2 x 650
Capacity, 200 liter drums	10 direct on	20 direct on	30 direct on	20 direct on	40 direct on	60 direct on
(examples)	grid support or 8 on	grid support or 16 on	grid support or 24 on	grid support or 16 on	grid support or 32 on	grid support or 48 on
	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or
	6 on euro-pallets	12 on euro-pallets	18 on euro-pallets	12 on euro-pallets	24 on euro-pallets	36 on euro-pallets
Article no.	C22-5501-B	С22-5502-В	C22-5503-B	C22-5504-B	C22-5505-B	C22-5506-B









Cabinets for pesticides, chemicals and poisons page 73-83



Combi cabinets page 89-97



Acid and alkali cabinets page 85-88



Hazardous substances cabinets as per DIN EN 14470-1 (Type 30) page 101-109



Hazardous substances cabinets as per DIN EN 14470-1 (Type 90)

page 111-139



Gas cylinder cabinets as per DIN EN 14470-2 (G 30) page 141

#### **PRACTICAL INFORMATION 4**

According to German legislation, operators as well as manufacturers of plants or systems for the storage of hazardous substances are responsible for the fact that in construction-related areas only building products are used which have appropriate proof of suitability.

In Germany, in addition to the planning, dimensioning and execution of buildings, the use of building products (proof of usability) is also regulated in the state building regulations. For the technical requirements, DIBt publishes the model administrative regulation Technical Building Regulations (MVV TB), which concretises the general requirements of the state building regulations. The MVV TB must be sent to each federal state by implement the administrative provision.

The MVV TB comprises 4 areas:

- A Specification of basic requirements for buildings
- B Components and special constructions
- C Building products and building types with a general test certificate issued by the building authorities as proof of usability
- D Construction products for which no proof of usability is required

Sump pallet with a capacity of < 1,000 1 fall into the MVV TB area C. Production and use of such sump trays are described in the StawaR. They are marked with a  $\ddot{U}$  sign (conformity mark), with which the manufacturer assures that he meets the requirements for the production according to StawaR and the construction product has been accepted by a recognized testing institute.

When deviating from the requirements of StawaR, e.g. in the restraint volume or in the use of the material, the sump tray requires a general type approval of the DIBt. The DIBt's test basis also includes requirements related to the water law in order to protect bodies of water as a usable good by means of sustainable water managment. To ensure this, the legislator has defined a suitability assessment for plants or plant parts. This is not required if the building product has a Building Inspectorate Suitability Cerification that includes the examination of issues of the water law, e.g. sump trays acc. to StawaR or sump trays with a general building inspection certificate. In the national area, the proof of usability is issued as a general technical approval (abZ) or general design approval (aBG) or a combined decision (abZ + aBG).

FüV-Nord

**Tested and** 

approved as per StawaR

Generally, a differentiation must be made between:

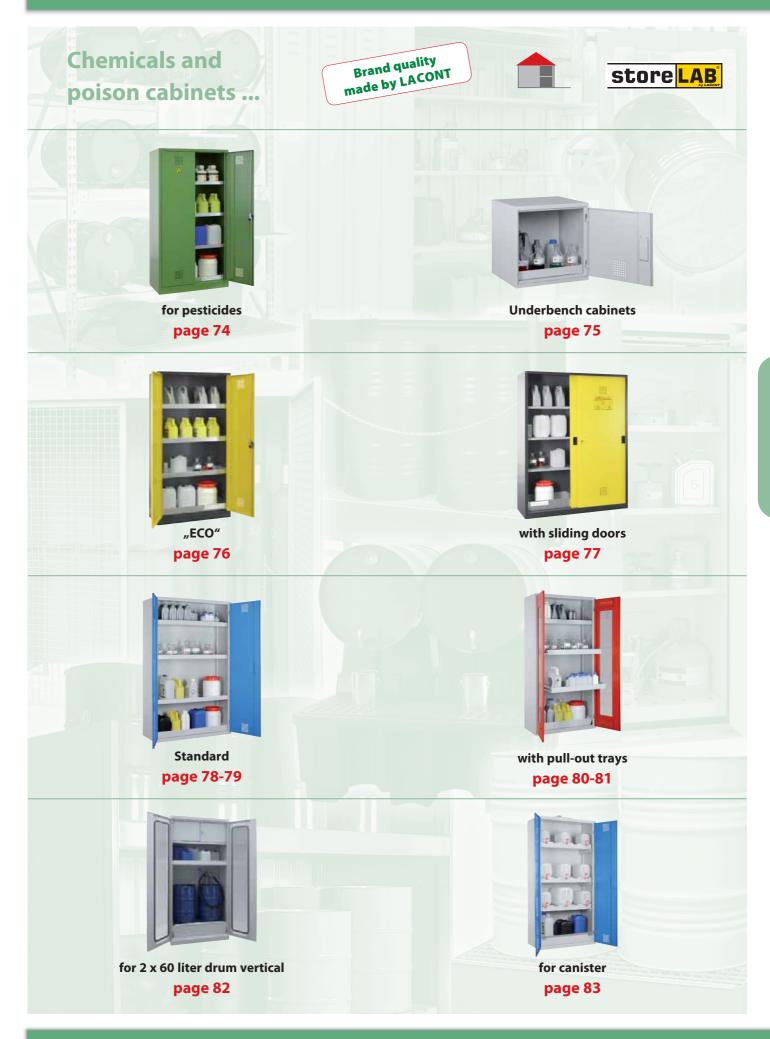
- a) Collection sump trays made from steel in hazardous substances cabinets according to DIN EN 14470-1
  - these collection sump trays are tested by an independent certified testing institute according to standardization
  - since safety cabinets for storing flammable liquids are limited regarding their size, execution and operation, special simplifications have been permitted in the StawaR.

#### and

- b) Collection sump trays made from steel in other hazardous substances cabinets
  - there is no separate normative regulation
  - the quantity stored in the cabinet can be arbitrarily large. Consequently, the collection sump tray ≤1.000 l sump capacity must be interpreted in a constructive way according to StawaR

In order to provide our customers with maximum quality and legal certainty when storing hazardous substances, we have decided to equip all LaCont hazardous-material cabinets with steel collection sump trays with tested and approved collection sump tray systems according to StawaR as standard:

- This frees our customers from a possible obligation to determine the suitability of the collection sump trays in accordance with the water law
- and certifies full compliance with the principle of concern according to WHG.





### CABINETS FOR PESTICIDES HEIGHT 1000 / 1950 MM

▲

PSM 500-1000 P,

Article no. B80-6554-A

# For storage of water-endangering pesticies in small containers indoors

- Made from high quality sheet steel
- Powder-coated in RAL 6011 reseda green
- Doors reinforced, with handle cylinder lock
- Height-adjustable storage levels
- Ventilation slots in the doors
- Cabinets 1000 mm height with 2 storage levels
- Cabinets 1950 mm height with 4 storage levels
- Base sump tray (AW) made from 3 mm sheet steel, galvanized

### - Ü-sign according to StawaR

- Bottoms of tray-shaped shelves (WB), galvanized, are liquid-tight welded, max. load capacity 50 kg
- Marking according to ASR A1.3



PSM 1000-1000 P, Article no. B80-6556-A



PSM 1000-1000 P, Article no. B80-6556-A



PSM 500 P, Article no. B80-6555-A





PSM 500-1000 P, Article no. B80-6554-A



PSM 1000 P, Article no. B80-6557-A

Model	PSM 500-1000 P	PSM 500 P	PSM 1000-1000 P	PSM 1000 P
External dimensions W x D x H (mm)	500 x 500 x 1000	500 x 500 x 1950	1000 x 500 x 1000	1000 x 500 x 1950
Door(s)	1	1	2	2
Sump capacity (l)	AW 1 x 20 / WB 1 x 20	AW 1 x 20 / WB 3 x 20	AW 1 x 30 / WB 1 x 20	AW 1 x 30 / WB 3 x 20
Weight (kg)	31	54	49	78
Article no., RAL 6011	B80-6554-A	B80-6555-A	B80-6556-A	B80-6557-A
A				
Accessories	Article no.	Article no.	Article no.	Article no.
Accessories Tray-shaped shelf, sheet steel, galvanized	Article no. B80-6558-A	Article no. B80-6558-A	Article no. B80-6559-A	Article no. B80-6559-A
Tray-shaped shelf, sheet steel, galvanized				
Tray-shaped shelf, sheet steel, galvanized PE-insert for base sump tray,	B80-6558-A	B80-6558-A	B80-6559-A	B80-6559-A



# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey
- Door(s) with central cylinder lock
- Ventilation slots in the door(s)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Base sump tray made from 3 mm powder-coated sheet steel in RAL 7035 - light grey as per
   WHG - Ü-sign according to StawaR

Marking according to ASR A1.3







CHS-AUS 600, Article no. B80-6223-A

Model	CHS-AUS 600	CHS-AUS 1100
External dimensions W x D x H (mm)	600 x 570 x 600	1100 x 570 x 600
Internal dimensions W x D x H (mm)	525 x 525 x 530	1025 x 525 x 530
Sump capacity (l)	30	30
Door(s)	1 (DIN right)	2
Weight (kg)	27	45
Article no., outer body:		
RAL 7035 - light grey	B80-6223-A	B80-6220-A



CHS-AUS 1100, Article no. B80-6220-A

### CHEMICALS AND POISONS CABINETS HEIGHT 1000/1300 MM

### For safe and regular storage of non-flammable hazardous

### substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey
- Door(s) with central cylinder lock
- Ventilation slots in the door(s)
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Marking according to ASR A1.3
- With inner fittings:

### CHS 950-1000 / CHS 600-1300:

- 1 tray-shaped shelf (EW) for CHS 950-1000; 2 trayshaped shelves (EW) for CHS 600-1300, made from powder-coated sheet steel in RAL 7035 - light grey
- Base sump tray (AW), made from powder-coated sheet steel in RAL 7035 light grey as per

### WHG - Ü-sign according to StawaR



CHS 950-1000, Article no. B80-6122-A



CHS 600-1300, Article no. B80-6133-A

Model	CHS 950-1000	CHS 600-1300
External dimensions W x D x H (mm)	950 x 500 x 1000	600 x 570 x 1315
Internal dimensions W x D x H (mm)	862 x 467 x 894	512 x 544 x 1310
Sump capacity (l)	AW 1 x 30 / EW 1 x 20	AW 1 x 30 / EW 2 x 20
Door(s)	2	1 (DIN right)
Weight (kg)	39	48
Article no., outer body: RAL 7035 - light grey	B80-6122-A	B80-6133-A





store LAB

### CHEMICALS AND POISONS CABINETS ECO HEIGHT 1950 MM

### For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7016 - anthrazit grey, door(s) in RAL 1018 - zinc yellow
- Door(s) with central cylinder lock
- Ventilation slots in the door(s)
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 20 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof optionally available
- Marking according to ASR A1.3
- With inner fittings:

### CS Eco 600 / CS Eco 950 / CS Eco 1200:

- 3 tray-shaped shelves (EW), galvanized
- Base tray (BW), made from 3 mm sheet steel, galvanized - as per WHG - Ü-sign according to StawaR





Article no. B80-6564-A



CS Eco 1000 P, Article no. B80-6565-A



CS Eco 640 P. Article no. B80-6564-A



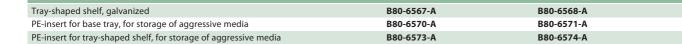
CS Eco 1000 P, Article no. B80-6565-A



CS Eco 1200 P, Article no. B80-6566-A

B80-6575-A

Model	CS Eco 640 P	CS Eco 1000 P	CS Eco 1200 P
External dimensions W x D x H (mm)	640 x 400 x 1950	1000 x 400 x 1950	1200 x 400 x 1950
Internal dimensions W x D x H (mm)	638 x 375 x 1840	998 x 375 x 1840	1198 x 375 x 1840
Sump capacity (l)	BW 1 x 20 / EW 3 x 20	BW 1 x 20 / EW 3 x 20	BW 1 x 30 / EW 3 x 20
Door(s)	1 (DIN right)	2	2
Weight (kg)	52	70	83
Article no., outer body: RAL 7016 - anthrazit grey,			
door(s) RAL 1018 - zinc yellow	B80-6564-A	B80-6565-A	B80-6566-A
Accessories	Article no.	Article no.	Article no.
Tray-shaped shelf, galvanized	B80-6567-A	B80-6568-A	B80-6569-A
PE-insert for base tray, for storage of aggressive media	B80-6570-A	B80-6571-A	B80-6572-A





### CHEMICALS AND POISONS CABINETS WITH SLIDING DOORS HEIGHT 1950 MM

### For safe and regular storage of non-flammable hazardous

### substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7016 - anthrazit grey, doors in RAL 1018 - zinc yellow
- with central dividing panel
- ◆ 2 sliding doors with central cylinder lock
- Ventilation slots in the doors
- Exhaust air connection on the cabinet roof optionally possible
- Marking according to ASR A1.3

### • With inner fittings:

- 6 shelves, non-tilt, height-adjustable at intervals of 20 mm, max. load 50 kg
- 2 base sump tray (AW), made from 3 mm sheet steel, galvanized as per WHG Ü-sign according to StawaR



CHS 2000 ST-P, Article no. B80-6577-A





Model	CHS 1500 ST-P	CHS 2000 ST-P
External dimensions W x D x H (mm)	1500 x 500 x 1950	2000 x 500 x 1950
Internal dimensions W x D x H (mm)	1180 x 430 x 1880	1480 x 430 x 1880
Sump capacity (I)	AW 2 x 30	AW 2 x 30
Sliding doors	2	2
Weight (kg)	123	160
Outer body: RAL 7016 - anthrazit grey		
Article no., doors: RAL 1018 - zinc yellow	B80-6576-A	B80-6577-A
Accessories	Article no.	Article no.
Shelf, galvanized	B80-6578-A	B80-6579-A
PE-insert for base sump tray,		
for storage of aggressive media	B80-6580-A	B80-6581-A



### CHEMICALS AND POISONS CABINETS HEIGHT 1950 MM

# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Door(s) with central cylinder lock
- Ventilation slots in the door(s)
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Marking according to ASR A1.3

### • With inner fittings:

### CHS 600 / CHS 950 / CHS 1200:

- 3 tray-shaped shelves (EW), made from powder-coated sheet steel in RAL 7035 light grey
- Base sump tray (AW), made from powder-coated sheet steel in RAL 7035 - light grey as per WHG - **Ü-sign according to** StawaR



CHS 600, door RAL 7035 Article no. B80-6134-A



CHS 950, doors RAL 3000 Article no. B80-6169-A







CHS 1200, doors RAL 5015 Article no. B80-6171-A

Model	CHS 600	CHS 950	CHS 1200
External dimensions W x D x H (mm)	600 x 570 x 1935	950 x 500 x 1950	1200 x 500 x 1950
Usable internal dimensions W x D x H (mm)	564 x 512 x 1890	910 x 440 x 1903	1160 x 440 x 1903
Sump capacity (I)	AW 1 x 30 / EW 3 x 20	AW 1 x 30 / EW 3 x 20	AW 1 x 39 / EW 3 x 20
Door(s)	1 (DIN right)	2	2
Weight (kg)	58	76	100
CHS outer body is always: RAL 7035 - light grey			
Article no., door(s) RAL 7035 - light grey	B80-6134-A	B80-6210-A	B80-6212-A
Article no., door(s) RAL 5015 - sky blue	B80-6161-A	B80-6166-A	B80-6171-A
Article no., door(s) RAL 1018 - zinc yellow	B80-6162-A	B80-6167-A	B80-6172-A
Article no., door(s) RAL 3000 - fire red	B80-6164-A	B80-6169-A	B80-6174-A

Accessories	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-6135-A	B80-2826-A	B80-6127-A
Perforated metal cover for base sump tray, RAL 7035	B80-6520-A	B80-6521-A	B80-6522-A
PE-insert for base sump tray, for storage of aggressive media	B80-6136-A	B80-2828-A	B80-6129-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-6137-A	B80-2830-A	B80-6128-A
Safe compartment sheet steel, RAL 7035	B80-6138-A	B80-6243-A	B80-6254-A



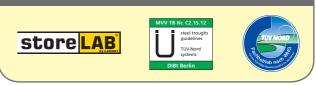
### CHEMICALS AND POISONS CABINETS HEIGHT 1950 MM WITH ACRYLIC GLASS DOORS

# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Acrylic glass door(s) with central cylinder lock
- Ventilation slots in the door(s)
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Marking according to ASR A1.3
- With inner fittings:

### CHS 600 GL / CHS 950 GL / CHS 1200 GL:

- 3 tray-shaped shelves (EW), made from powder-coated sheet steel in RAL 7035 light grey
- Base sump tray (AW), made from powder-coated sheet steel in RAL 7035 - light grey as per WHG - **Ü-sign according to StawaR**





4 door colors available - at no extra charge!



CHS 600 GL, door RAL 3000 Article no. B80-6180-A



CHS 950 GL, doors RAL 7035 Article no. B80-6216-A



CHS 1200 GL, doors RAL 1018 Article no. B80-6189-A

Model	CHS 600 GL	CHS 950 GL	CHS 1200 GL
External dimensions W x D x H (mm)	600 x 570 x 1935	950 x 500 x 1950	1200 x 500 x 1950
Usable internal dimensions W x D x H (mm)	564 x 512 x 1890	910 x 440 x 1903	1160 x 440 x 1903
Sump capacity (I)	AW 1 x 30 / EW 3 x 20	AW 1 x 30 / EW 3 x 20	AW 1 x 39 / EW 3 x 20
Door(s)	1 (DIN right, acrylic glass door)	2 (acrylic glass doors)	2 (acrylic glass doors)
Weight (kg)	58	76	100
CHS outer body is always: RAL 7035 - light grey			
Article no., door(s) RAL 7035 - light grey	B80-6176-A	B80-6216-A	B80-6187-A
Article no., door(s) RAL 5015 - sky blue	B80-6177-A	B80-6182-A	B80-6188-A
Article no., door(s) RAL 1018 - zinc yellow	B80-6178-A	B80-6183-A	B80-6189-A
Article no., door(s) RAL 3000 - fire red	B80-6180-A	B80-6185-A	B80-6191-A

Accessories	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-6135-A	B80-2826-A	B80-6127-A
Perforated metal cover for base sump tray, RAL 7035	B80-6520-A	B80-6521-A	B80-6522-A
PE-insert for base sump tray, for storage of aggressive media	B80-6136-A	B80-2828-A	B80-6129-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-6137-A	B80-2830-A	B80-6128-A
Safe compartment sheet steel, RAL 7035	B80-6138-A	B80-6243-A	B80-6254-A



### CHEMICALS AND POISONS CABINETS WITH PULL-OUT TRAYS HEIGHT 1950 MM

# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Door(s) with central cylinder lock
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Ventilation slots in the door(s)
- Marking according to ASR A1.3
- With inner fittings:
  - 1 tray-shaped shelf (EW), non-tilt, height-adjustable at intervals of 25 mm, max. load 50 kg
  - 2 pull-out trays (AZ) with full extension, max. load 50 kg
  - Base sump tray (AW) made from 3 mm powder-coated sheet steel in RAL 7035 - light grey as per WHG - **Ü-sign according**

### to StawaR



CHS 600 VS, door RAL 7035 Article no. B80-6144-A



CHS 950 VS, doors RAL 3000 Article no. B80-6403-A







CHS 1200 VS, doors RAL 5015 Article no. B80-6405-A

Model	CHS 600 VS	CHS 950 VS	CHS 1200 VS
External dimensions W x D x H (mm)	600 x 570 x 1935	950 x 500 x 1950	1200 x 500 x 1950
Usable internal dimensions W x D x H (mm)	564 x 512 x 1890	910 x 440 x 1903	1160 x 440 x 1903
Sump capacity (l)	AW 1 x 30 / AZ 2 x 20 / EW 1 x 20	AW 1 x 30 / AZ 2 x 20 / EW 1 x 20	AW 1 x 39 / AZ 2 x 20 / EW 1 x 20
Wing doors	1 (DIN right)	2	2
Weight (kg)	58	76	100
CHS outer body is always: RAL 7035 - light grey			
Article no., door(s) RAL 7035 - light grey	B80-6144-A	B80-6217-A	B80-6145-A
Article no., door(s) RAL 5015 - sky blue	B80-6193-A	B80-6400-A	B80-6405-A
Article no., door(s) RAL 1018 - zinc yellow	B80-6194-A	B80-6401-A	B80-6406-A
Article no., door(s) RAL 3000 - fire red	B80-6196-A	B80-6403-A	B80-6408-A

Accessories	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-6135-A	B80-2826-A	B80-6127-A
Pull-out tray, sheet steel RAL 7035	B80-6146-A	B80-2871-A	B80-6147-A
Perforated metal cover for base sump tray, RAL 7035	B80-6520-A	B80-6521-A	B80-6522-A
PE-insert for base sump tray, for storage of aggressive media	B80-6136-A	B80-2828-A	B80-6129-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-6137-A	B80-2830-A	B80-6128-A
PE-insert for pull-out tray, for storage of aggressive media	B80-6524-A	B80-6525-A	B80-6526-A
Safe compartment sheet steel, RAL 7035	B80-6138-A	B80-6243-A	B80-6254-A



### CHEMICALS AND POISONS CABINETS WITH PULL-OUT TRAYS HEIGHT 1950 MM WITH ACRYLIC GLASS DOORS

# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Acrylic glass door(s) with central cylinder lock
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Ventilation slots in the door(s)
- Marking according to ASR A1.3
- With inner fittings:
  - 1 tray-shaped shelf (EW), non-tilt, height-adjustable at intervals of 25 mm, max. load 50 kg
  - 2 pull-out trays (AZ) with full extension, max. load 50 kg
  - Base sump tray (AW) made from 3 mm powder-coated sheet steel in RAL 7035 light grey as per WHG **Ü-sign according**

### to StawaR



CHS 600 VS GL, door RAL 5015 Article no. B80-6411-A



CHS 950 VS GL, doors RAL 3000 Article no. B80-6420-A





4 door colors available - at no extra charge!



CHS 1200 VS GL, doors RAL 1018 Article no. B80-6424-A

Model	CHS 600 VS GL	CHS 950 VS GL	CHS 1200 VS GL
External dimensions W x D x H (mm)	600 x 570 x 1935	950 x 500 x 1950	1200 x 500 x 1950
Usable internal dimensions W x D x H (mm)	564 x 512 x 1890	910 x 440 x 1903	1160 x 440 x 1903
Sump capacity (l)	AW 1 x 30 / AZ 2 x 20 / EW 1 x 20	AW 1 x 30 / AZ 2 x 20 / EW 1 x 20	AW 1 x 39 / AZ 2 x 20 / EW 1 x 20
Wing doors	1 (DIN right, acrylic glass door)	2 (acrylic glass doors)	2 (acrylic glass doors)
Weight (kg)	58	76	100
CHS outer body is always: RAL 7035 - light grey			
Article no., door(s) RAL 7035 - light grey	B80-6410-A	B80-6416-A	B80-6422-A
Article no., door(s) RAL 5015 - sky blue	B80-6411-A	B80-6417-A	B80-6423-A
Article no., door(s) RAL 1018 - zinc yellow	B80-6412-A	B80-6418-A	B80-6424-A
Article no., door(s) RAL 3000 - fire red	B80-6414-A	B80-6420-A	B80-6426-A

Accessories	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-6135-A	B80-2826-A	B80-6127-A
Pull-out tray, sheet steel RAL 7035	B80-6146-A	B80-2871-A	B80-6147-A
Perforated metal cover for base sump tray, RAL 7035	B80-6520-A	B80-6521-A	B80-6522-A
PE-insert for base sump tray, for storage of aggressive media	B80-6136-A	B80-2828-A	B80-6129-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-6137-A	B80-2830-A	B80-6128-A
PE-insert for pull-out tray, for storage of aggressive media	B80-6524-A	B80-6525-A	B80-6526-A
Safe compartment sheet steel, RAL 7035	B80-6138-A	B80-6243-A	B80-6254-A



### CHEMICALS AND POISONS CABINETS FOR TWO 60 LITER DRUMS / CHS-2FAS 950

# For safe and regular storage of non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, door colors available in RAL 7035 - light grey or RAL 5015 - sky blue
- Doors with central cylinder lock
- Ventilation slots in the doors
- Tray-shaped shelf
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Marking according to ASR A1.3
- With inner fittings:
  - 1 tray-shaped shelf (EW), powder-coated sheet steel in RAL 7035 light grey
  - Base sump tray (AW), sump capacity 65 liters, with grid as storage level, made from 3 mm powder-coated sheet steel in RAL 7035 - light grey as per WHG - Ü-sign according to StawaR



Article no. B80-6225-A



CHS-2FAS 950 GL, Article no. B80-6239-A, with additional tray-shaped shelf



CHS-2FAS 950 GL, Article no. B80-6239-A, with optional safe compartment



Model	CHS-2FAS 950	CHS-2FAS 950 GL
External dimensions W x D x H (mm)	950 x 500 x 1950	950 x 500 x 1950
Internal dimensions W x D x H (mm)*	910 x 440 x 1719	910 x 440 x 1719
Sump capacity (I)	AW 1 x 65 / EW 1 x 20	AW 1 x 65 / EW 1 x 20
Double-winged doors	2	2 (acrylic glass doors)
Capacity	2 x 60 liter drum + small containers	2 x 60 liter drum + small containers
Weight (kg)	100	100
CHS outer body is always: RAL 7035 - light grey		
Article no., doors RAL 7035 - light grey	B80-6225-A	B80-6239-A
Article no., doors RAL 5015 - sky blue	B80-6428-A	B80-6433-A

\* Height from top level grid

Accessories	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-2826-A	B80-2826-A
PE-insert for base sump tray, for storage of aggressive media	B80-6240-A	B80-6240-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-2830-A	B80-2830-A
Safe compartment	B80-6243-A	B80-6243-A



### CHEMICALS AND POISONS CABINETS FOR CANISTER

# For safe and regular storage / filling of canister with non-flammable hazardous substances and chemicals in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, door colors available in RAL 7035 - light grey or RAL 5015 - sky blue
- Doors with central cylinder lock
- Ventilation slots in the doors
- With integrated foldable drip-loss protection in order to direct drip-loss into the base sump tray
- Tray-shaped shelves
  - non-tilt, max. load 60 kg / shelf
  - height-adjustable at intervals of 25 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Marking according to ASR A1.3
- With inner fittings: CHS-KAN 950 / CHS-KAN 950 GL:
  - 3 tray-shaped shelves (EW), powder-coated sheet steel in RAL 7035 - light grey with perforated metal cover; Tray-shaped shelves (EW) with refilling device (either suitable for 5 x 5 liter, 4 x 10 liter or 3 x 20 liter canister)
  - Base sump tray (AW), made from powder-coated sheet steel,
     3 mm, in RAL 7035 light grey, with perforated metal cover, as per
     WHG Ü-sign according to StawaR

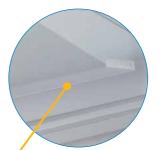


CHS-KAN 950 GL,

doors RAL 5015 Article no. B80-6463-A

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Foldable drip-loss protection



CHS-KAN 950, doors RAL 7035 Article no. B80-6233-A



CHS-KAN 950, doors RAL 5015 Article no. B80-6458-A



CHS-KAN 950 GL, doors RAL 7035 Article no. B80-6234-A

Model	CHS-KAN 950	CHS-KAN 950 GL
External dimensions W x D x H (mm)	950 x 500 x 1950	950 x 500 x 1950
Internal dimensions W x D x H (mm)	910 x 440 x 1903	910 x 440 x 1903
Sump capacity (l)	AW 1 x 30 / EW 3 x 20	AW 1 x 30 / EW 3 x 20
Wing doors	2	2 (acrylic glass doors)
Weight (kg)	110	110
CHS outer body is always: RAL 7035 - light grey		
Article no., doors RAL 7035 - light grey	B80-6233-A	B80-6234-A
Article no., doors RAL 5015 - sky blue	B80-6458-A	B80-6463-A
Accessories	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035 with perforated metal cover	B80-6235-A	B80-6235-A
PE-insert for base sump tray, for storage of aggressive media	B80-2828-A	B80-2828-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-6237-A	B80-6237-A
Safe compartment	B80-6243-A	B80-6243-A

### **PRACTICAL INFORMATION 5**

### Fire protection requirements according to the TRGS 510 / TRGS 800

### 1. Storage indoors (TRGS 510, No. 12.3 Construction requirements):

- Walls, ceilings and doors of storage rooms have to be made from non-flammable construction (paragraph 1).
- Storage rooms above 1,000 liters (inflammable and extremely inflammable as well as inflammable above 10 tons) have to be separated fire-resistantly (F90 as per DIN 4102) from adjoining rooms (paragraph 2).
- Sump trays have to be impermeable to the stored liquids (paragraph 5).
- Storage rooms are not allowed to be used for other purposes (paragraph 8).

### 2. Storage outdoors:

When storing outdoors hazardous substances storages do not have to be fire-resistant if:

- a sufficient safety distance of at least 10 meters to buildings can be maintained or
- an existing building exterior wall is fire resistant (F90 according to DIN 4102) or
- fire-resistant components of sufficient height and width between buildings and containers exists.

Exemption clause according to TRGS 510, no. 12.4.1 paragraph 2:

According to a total storage quantity of more than 200 kg and below 1,000 kg a safety distance to surrounding buildings of at least 5 m has to be observed for movable containers. Regarding a total storage quantity from 1,000 kg a safety distance to surrounding buildings of at least 10 m has to be observed for movable containers.

### **Definitions**

### 1. "Passive storage"

The term "passive storage" is used for storage of hazardous substances in catalogue by not being opened during storage. Concerning the respective regulations on storage of hazardous substances this term is not applied anymore.

### 2. "Active storage"

This term is currently used in TRGS 509. It is about "retention of flammable liquids with a flash point  $\leq$  55 °C in movable containers which can be filled or emptied over a longer period by using a firmly connected pipeline or hose line conerning storage location and can also be transported after filling and emptying". It is all about opening of storage containers in catalogue.

### **Basic requirements (extract)**

Storage rooms have to be ventilated sufficiently. Ventilation has to ensure a constant 5-fold air exchange per hour and be effective near the ground. For exclusive storage of flammable liquids a 0.4-fold air exchange per hour is to be guaranteed.





### **Classification of explosiv-proof zones**

Zone	Fuel type	Occurance of explosive atmosphere, period of existance	Application
0	Gases, Fumes, Vapours	constant, frequent, over an extended period	Inside of tanks
1	Gases, Fumes, Vapours	occasional in standard operation (during decanting/filling)	filling / decanting
2	Gases, Fumes, Vapours	is not expected in standard operation, in case of deviation	
		a short-term occurence is possible	storing



For this purpose please observe our practical information on page 142!





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### SLS - FUME CUPBOARD UNDERBENCH CABINETS AS PER TRGS 526 / DGUV

### For storage of acids and alkalis

- Body made from HPL-coated sheets particularly impact, scratch and abrasion proof
- Color RAL 7035 light grey
- Inner body / inner fittings completely made from corrosion-proof components
- Doors with separate cylinder locks
- Marking according to ASR A1.3
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Supply air by ventilation grille
- SLS-AUS 1100 with center partition wall

### With inner fittings:

- ◆ 1 (SLS-AUS 600) pull-out shelf, or 2 pull-out shelves, with end stop, arranged side by side
  - Max. load 20 kg / shelf
  - Front edge of shelves in attractive solid wood design
  - PE sump tray (sump capacity 20 liters) on shelf secured against slipping - easy to remove



SLS-AUS 600, Article no. B80-2859-A



Article no. B80-2823-A

Model		SLS-AUS 600	SLS-AUS 1100
External dimension W x D x H (mm)		600 x 570 x 600	1100 x 570 x 600
Pull-out shelves		1	2
Usable inner shelf height (mm)		1 x 495	2 x 495
Door(s)		1	2
Weight (kg)		35	65
Door	hinge		
Article no., outer body:	left	B80-2859-A	
RAL 7035 - light grey	right	B80-2860-A	B80-2823-A
Accessories		Article no.	Article no.
Extra pull-out shelf as 2nd storage level		B80-2824-A	B80-2868-A
Socle height 35 mm		B80-2825-A	B80-2869-A

### SLS - CABINETS - WIDTH 600 MM AS PER TRGS 526 / DGUV

### For storage of acids and alkalis

- ٠ Body made from HPL-coated sheets - particularly impact, scratch and abrasion proof
- Color RAL 7035 light grey ٠
- Inner body / inner fittings completely made from corrosion-proof components ٠
- Doors with separate cylinder locks
- Marking according to ASR A1.3
- Leveling feets for installing cabinet horizontally
- With central horizontal division for storage of acids and alkalis in separate compartments
- Supply air by ventilation grille in the back wall
- DN 80 ventilation connection for exhaust air extraction on cabinet roof

### With inner fittings:

- Pull-out shelves (to full extent) with end stop
  - Max. load 20 kg / shelf
  - Front edge of shelves in attractive solid wood design
  - PE sump tray (sump capacity 20 liters) on shelf secured against slipping - easy to remove
  - Model SLS 600 GL/3-SF3 additionally with full extent pull-out drawers with built-in PE sump trays (sump capacity 20 liters)



SLS 600 GL/6. Article no. B80-3014-D

SLS 600/4. Article no. B80-3010-D



Model		SLS 600/4	SLS 600/6	SLS 600 GL/4	SLS 600 GL/6	SLS 600 GL/3-SF3
External dimension W x D x H (	(mm)	600 x 600 x 1935	600 x 600 x 1935	600 x 600 x 1935	600 x 600 x 1935	600 x 600 x 1935
Pull-out shelves		2 x 2	2 x 3	2 x 2	2 x 3	3
Usable inner shelf height (mm)	)	4 x 420	4 x 275 / 2 x 248	4 x 420	4 x 275 / 2 x 248	2 x 275 / 1 x 248
Drawers		-	-	-	-	3
Usable inner drawer height (m	m)	-	-	-	-	1 x 255 / 1 x 275 / 1 x 250
Doors		2	2	2 (acrylic glass doors)	2 (acrylic glass doors)	1 (acrylic glass door)
Weight (kg)		110	116	110	116	116
	Door hinge					
Article no., outer body:	left	B80-3010-D	B80-3012-D	B80-3018-D	B80-3014-D	B80-3020-D
RAL 7035 - light grey	right	B80-3011-D	B80-3013-D	B80-3019-D	B80-3015-D	B80-3021-D
Accessory			Article no.			
Pull-out shelf			B80-2824-A			

Pull-out shelf







### SLS - CABINETS WIDTH 1200 MM AS PER TRGS 526 / DGUV

### For storage of acids and alkalis

- Body made from HPL-coated sheets particularly impact, scratch and abrasion proof
- Color RAL 7035 light grey
- Inner body / inner fittings completely made from corrosion-proof components
- Doors with separate cylinder locks
- Marking according to ASR A1.3
- Leveling feets for installing cabinet horizontally
- With central horizontal and vertical divisions for storage of acids and alkalis in 4 separate compartments
- Model SLS 1200 GL with acrylic glass doors
- Air supply by ventilation grille in the back wall
- DN 80 ventilation connection for exhaust air extraction on cabinet roof



SLS 1200/12, Article no. B80-3016-D

### With inner fittings:

- Pull-out shelves (to full extent)
  - with end stop

Accessory

Pull-out shelf

- Max. load 20 kg per shelf
- Front edge of shelves in attractive solid wood design
- PE sump tray (sump capacity 20 liters) on shelf secured against slipping - easy to remove



page 136!



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SLS 1200 GL/12, Article no. B80-3023-D

Article no.

B80-2870-A

Model	SLS 1200/8	SLS 1200/12	SLS 1200 GL/8	SLS 1200 GL/12
External dimensions				
W x D x H (mm)	1200 x 600 x 1935	1200 x 600 x 1935	1200 x 600 x 1935	1200 x 600 x 1935
Pull-out shelves	4 x 2	4 x 3	4 x 2	4 x 3
Usable inner shelf height (mm)	8 x 420	8 x 275 / 4 x 248	8 x 420	8 x 275 / 4 x 248
Doors	4	4	4 (acrylic glass doors)	4 (acrylic glass doors)
Weight (kg)	220	232	220	232
Article no., outer body:				
RAL 7035 - light grey	B80-3017-D	B80-3016-D	B80-3022-D	B80-3023-D

6 SLS 1200/12, Article no. B80-3016-D (page 87)

# A standards register A standards register

3 SLS 1200/6-SF6, Article no. B80-3025-D (page 88)

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### SLS - CABINETS WIDTH 1200 MM AS PER TRGS 526 / DGUV

### For storage of acids and alkalis

- Body made from HPL-coated sheets particularly impact, scratch and abrasion proof
- Color RAL 7035 light grey
- Inner body / inner fittings completely made from corrosion-proof components
- Doors with separate cylinder locks, 6 drawers in lower part
- Marking according to ASR A1.3
- Leveling feets for installing cabinet horizontally
- With central horizontal and vertical divisions for storage of acids and alkalis in 4 separate compartments
- Model SLS 1200 GL with acrylic glass doors
- Supply air by ventilation grille in the back wall
- DN 80 ventilation connection for exhaust air extraction on cabinet roof

### With inner fittings:

- Pull-out shelves (to full extent) with end stop
  - Max. load 20 kg per shelf
  - Front edge of shelves in attractive solid wood design
  - PE sump tray (sump capacity 20 liters) on shelf secured against slipping easy to remove
- Pull-out drawers (to full extent) with end stop
  - Max. load 20 kg per drawer
  - PE sump tray (sump capacity 20 liters) in drawer secured against slipping easy to remove



Extraction fans please see page 136!





Pull-out drawer with end stop



SLS 1200 GL/6-SF6, Article no. B80-3027-D



SLS 1200/6-SF6, Article no. B80-3025-D

Model	SLS 1200/4-SF 6	SLS 1200/6-SF6	SLS 1200 GL/4-SF6	SLS 1200 GL/6-SF6
External dimensions W x D x H (mm)	1200 x 600 x 1935			
Pull-out shelves	2 x 2	2 x 3	2 x 2	2 x 3
Usable inner shelf				
height (mm)	4 x 420	4 x 275 / 2 x 248	4 x 420	4 x 275 / 2 x 248
Drawers	6	6	6	6
Usable inner drawer				
height (mm)	2 x 255 / 2 x 275 / 2 x 250	2 x 255 / 2 x 275 / 2 x 250	2 x 255 / 2 x 275 / 2 x 250	2 x 255 / 2 x 275 / 2 x 250
Doors	2	2	2 (acrylic glass doors)	2 (acrylic glass doors)
Weight (kg)	220	232	220	232
Article no., outer body:				
RAL 7035 - light grey	B80-3024-D	B80-3025-D	B80-3026-D	B80-3027-D
Accessory		Article no.		
Pull-out shelf		B80-2870-A		

store **LAB** 

Brand quality

MADE by LACONT





**Chemicals and poisons cabinets** for small containers with safety box

page 90



Hazardous substances cabinets width 600 mm - KombiLAB Type 30

page 92



Chemicals and poisons cabinets for 60 liter drums with safety box

page 91



Hazardous substances cabinets width 1200 mm - KombiLAB Type 30 page 93



Hazardous substances cabinets width 600 mm - KombiLAB Type 90 page 94



Hazardous substances cabinets width 1200 mm - KombiLAB Type 90 page 95-97



### CHEMICALS CABINETS FOR SMALL CONTAINERS WITH SAFETY BOX

For safe and regular storage of non-flammable hazardous substances, chemicals and flammable liquids as per DIN EN 14470-1 / TRGS 510 in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Doors with central cylinder lock
- Ventilation slots in the doors
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30 / type 60) with a fire resistance capability of >30 and >60 minutes for the small safety cabinet
- Small safety cabinet with separate cylinder lock
- Central DN 80 ventilation connection for exhaust air extraction of both cabinets on roof
- Ground connection in accordance with TRBS 2153 avoidance of sources of ignition)
- With inner fittings: CHS 950 / SiB 30 / CHS 950 / SiB 60:
  - Made of powder-coated sheet steel in RAL 7035 light grey
  - Model GL with acrylic glass doors
  - **Chemical cabinet**
  - 3 x tray-shaped shelves (EW)
  - Small safety cabinet / Safety box as per DIN EN 14470-1
  - Base sump tray (BW) sump capacity 11 liters, as per
  - WHG Ü-sign according to StawaR
  - Usable dimensions W x D x H (mm) =  $760 \times 340 \times 440$
  - Automatic thermal closing mechanism if fire occurs







CHS 950 / SiB 60, doors RAL 1018, Article no. B80-6444-A

CHS 950 GL / SiB 30,

doors RAL 5015, Article no. B80-6448-A





CHS 950 GL / SiB 30, doors RAL 3000 Article no. B80-6451-A

Model	CHS 950 / SiB 30	CHS 950 / SiB 60	CHS 950 GL / SiB 30	CHS 950 GL / SiB 60
External dimensions W x D x H (mm)	950 x 500 x 1950	950 x 500 x 1950	950 x 500 x 1950	950 x 500 x 1950
Internal dimensions W x D x H (mm)	862 x 467 x 1240	862 x 467 x 1240	862 x 467 x 1240	862 x 467 x 1240
Sump capacity (l) - EW / BW	3 x 20 / 1 x 11	3 x 20 / 1 x 11	3 x 20 / 1 x 11	3 x 20 / 1 x 11
Wing doors	2	2	2 (acrylic glass doors)	2 (acrylic glass doors)
Weight (kg)	145	150	145	150
CHS outer body is always: RAL 7035 - light grey				
Article no., doors RAL 7035 - light grey	B80-6207-A	B80-6208-A	B80-6214-A	B80-6215-A
Article no., doors RAL 5015 - sky blue	B80-6438-A	B80-6443-A	B80-6448-A	B80-6453-A
Article no., doors RAL 1018 - zinc yellow	B80-6439-A	B80-6444-A	B80-6449-A	B80-6454-A
Article no., doors RAL 3000 - fire red	B80-6441-A	B80-6446-A	B80-6451-A	B80-6456-A

Accessories	Article no.	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-2826-A	B80-2826-A	B80-2826-A	B80-2826-A
Perforated metal cover for base sump tray				
of small safety cabinet, RAL 7035	B80-6213-A	B80-6213-A	B80-6213-A	B80-6213-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-2830-A	B80-2830-A	B80-2830-A	B80-2830-A
PE-insert for base sump tray of small safety box,				
for storage of aggressive media	B80-6523-A	B80-6523-A	B80-6523-A	B80-6523-A



### CHEMICALS CABINETS FOR 60 LITER DRUMS WITH SAFETY BOX

### For safe and regular storage of non-flammable hazardous substances, chemicals and flammable liquids as per DIN EN 14470-1 / TRGS 510 in workspaces

- Single-wall body made from high-quality powder-coated sheet steel in RAL 7035 - light grey, 4 door colors available - at no extra charge
- Doors with central cylinder lock
- Ventilation slots in the doors
- Tray-shaped shelves
  - non-tilt, max. load 50 kg / shelf
  - height-adjustable at intervals of 25 mm
- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30 / type 60) with a fire resistance capability of >30 and >60 minutes for the small safety cabinet
- Small safety cabinet with separate cylinder lock
- Central DN 80 ventilation connection for exhaust air extraction of both cabinets on roof
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- With inner fittings: CHS 950-2FAS / SiB 30 / CHS 950-2FAS / SiB 60:
  - Made of powder-coated sheet steel in RAL 7035 light grey
  - Model GL with acrylic glass doors

### **Chemical cabinet**

- 1 x tray-shaped shelf (EW)
- Base sump tray (AW), sump capacity 65 liters, with grid as storage level, made from 3 mm powder-coated sheet steel in RAL 7035 - light grey as per WHG - Ü-sign according to StawaR

### Small safety cabinet / Safety box as per DIN EN 14470-1

- Base sump tray (BW) sump capacity 11 liters
- Usable dimensions  $W \times D \times H$  (mm) = 760 x 340 x 440
- Automatic thermal closing mechanism if fire occurs









CHS 950-2FAS / SiB 60, doors RAL 3000, Article no. B80-6492-A



CHS 950-2FAS GL / SiB 30, doors RAL 1018, Article no. B80-6495-A

CHS 950-2FAS / SiB 30, doors RAL 7035, Article no. B80-6249-A



CHS 950-2FAS GL / SiB 30, doors RAL 5015, Article no. B80-6494-A

Model	CHS 950-2FAS / SiB 30	CHS 950-2FAS / SiB 60	CHS 950-2FAS GL / SiB 30	CHS 950-2FAS GL / SiB 60
External dimensions W x D x H (mm)	950 x 500 x 1950			
Internal dimensions W x D x H (mm	862 x 467 x 1240			
Sump capacity (l) - EW / AW / BW	1 x 20 / 1 x 65 / 1 x 11	1 x 20 / 1 x 65 / 1 x 11	1 x 20 / 1 x 65 / 1 x 11	1 x 20 / 1 x 65 / 1 x 11
Wing doors	2	2	2 (acrylic glass doors)	2 (acrylic glass doors)
Weight (kg)	145	150	145	150
CHS outer body is always: RAL 7035 - light grey				
Article no., doors RAL 7035 - light grey	B80-6249-A	B80-6250-A	B80-6251-A	B80-6252-A
Article no., doors RAL 5015 - sky blue	B80-6484-A	B80-6489-A	B80-6494-A	B80-6499-A
Article no., doors RAL 1018 - zinc yellow	B80-6485-A	B80-6490-A	B80-6495-A	B80-6500-A
Article no., doors RAL 3000 - fire red	B80-6487-A	B80-6492-A	B80-6497-A	B80-6502-A

Accessories	Article no.	Article no.	Article no.	Article no.
Tray-shaped shelf, sheet steel RAL 7035	B80-2826-A	B80-2826-A	B80-2826-A	B80-2826-A
Perforated metal cover for base sump tray				
of small safety cabinet, RAL 7035	B80-6213-A	B80-6213-A	B80-6213-A	B80-6213-A
PE-insert for tray-shaped shelf, for storage of aggressive media	B80-2830-A	B80-2830-A	B80-2830-A	B80-2830-A
PE-insert for base sump tray of small safety box,				
for storage of aggressive media	B80-6523-A	B80-6523-A	B80-6523-A	B80-6523-A



### TYPE 30 / 600 KL - KOMBILAB AS PER DIN EN 14470-1 (TYPE 30)

store LAB

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space.

### Safety cabinet

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard



Type 30 / 600 KL3, Article no. B80-2988-A





Type 30 / 600 KL3, Article no. B80-2988-A

### With inner fittings:

### **1** Storage cabinet (type 30) for flammable liquids as per DIN EN 14470-1

- 1 x base sump tray (sump capacity 23 liters) as per WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 2 x shelf
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- door hold-open device
- Poison compartment with acrylic glass door

- Dividing shelf

or

- Rotating turntable

Model		Туре 30 / 600 КL3	Type 30 / 600 KL4
External dimensions W x D x H (mm)		595 x 600 x 1935	595 x 600 x 1935
Doors		2	2
Poison compartment	Dividing shelf	1	-
	Rotating turntable	-	1
Weight (kg)		141	146
Outer body: RAL 7035 - light grey	Material inner fittings		
Article no., door safety cabinet (type 30): RAL 7035 - light grey	sheet steel	B80-2988-A	B80-2990-A
Article no., door safety cabinet (type 30): RAL 1007 - daffodil yellow	sheet steel	B80-2987-A	B80-2989-A



### TYPE 30 / 1200 KL - KOMBILAB AS PER DIN EN 14470-1 (TYPE 30)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space.



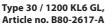






- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510
- Leveling feets for installing cabinet horizontally ٠
- Door with cylinder lock
- Door hinged right as standard







Type 30 / 1200 KL4, Article no. B80-2612-A

### With inner fittings:

### **1** Safety cabinet (type 30) for flammable liquids as per DIN EN 14470-1

- 1 x base sump tray (sump capacity 23 liters) as per WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 2 x shelf
- Automatic thermal closing mechanism if fire occurs
- Door after temperature increase ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C (±10°C)
- door hold-open device
- **2** Storage cabinet for acids and alkalis
  - 2 x 2 or 2 x 3 pull-out tray-shaped shelves, made from white PE
- Poison compartment with acrylic glass door
  - Dividing shelf
- 4 Cover panel made from HPL-coated sheets in RAL 7035 - light grey



Extraction fans please see page 136!

1195 x 600 x 1935	1195 x 600 x 1935	1195 x 600 x 1935
		1172 X 000 X 1933
4	4	4
<b>ves</b> 4	6	б
<b>m)</b> 4 x 420	4 x 275 / 2 x 248	4 x 275 / 2 x 248
251	257	257
gs		
eel <b>B80-2612-A</b>	B80-2613-A	B80-2614-A
eel <b>B80-2615-A</b>	B80-2616-A	B80-2617-A
n n	251 ngs teel B80-2612-A	Ives         4         6           nm)         4 x 420         4 x 275 / 2 x 248           251         257           ngs         1           teel         B80-2612-A

" plus cover panel: height 110 mm



### TYPE 90 / 600 KL - KOMBILAB AS PER DIN EN 14470-1 (TYPE 90)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space.



### **1** Safety cabinet (type 90) for flammable liquids as per DIN EN 14470-1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance of >90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 light grey
- Inner body made from HPL coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Shelf height-adjustable at intervals of 64 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even with exhaust air connection!)
- ◆ Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally ٠

2

Doors with cylinder lock





Type 90 / 600 KL1, Article no. B80-2887-A

### With inner fittings:

### **1** Safety cabinet (type 90)

- 1 x base sump tray (sump capacity 22 liters) as per WHG - Ü-sign according

### to StawaR

- 1 x perforated base tray cover as 1st storing level
- 2 x shelf
- With automatic thermal closing mechanism if fire occurs
- Door after temperature increase to ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C (±10°C)
- door hold-open device

### Poison compartment with acrylic glass door

- Dividing shelf

or

- Fully rotating turntable

		Type 90 / 600 KL1	Туре 90 / 600 КL2
		595 x 600 x 1935	595 x 600 x 1935
		2	2
Shelf		1	-
table		-	1
		245	250
ninge	Material inner fittings		
left	sheet steel	B80-2886-A	B80-2888-A
right	sheet steel	B80-2887-A	B80-2889-A
	table ninge left	hinge Material inner fittings left sheet steel	595 x 600 x 1935         2         Shelf       1         table       -         245         ninge       Material inner fittings         left       sheet steel       B80-2886-A



Type 90 / 600 KL2, Article no. B80-2889-A



Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space.



2

### **1** Safety cabinet (type 90) for flammable liquids as per DIN EN 14470-1

- Whole construction tested and approved by an authorized materials testing Institute as per DIN EN 14470-1 (type 90) with a fire resistance >90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in RAL 7035 light grey
- ◆ Inner body made from HPL-coated sheets in RAL 7035 light grey
- Stainless steel base plate Niro Rhombus
- Shelf height-adjustable at intervals of 64 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3

3

1

Leveling feets for installing cabinet horizontally

4

Type 90 / 1200 KL3 GL, Article no. B80-2822-A

Doors with cylinder lock



Type 90 / 1200 KL1, Article no. B80-2627-A

4

### With inner fittings:

### **1** Safety cabinet (type 90)

- 1 x base sump tray (sump capacity 22 liters) as per WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 2 x shelf
- Automatic thermal closing mechanism if fire occurs
- Door after temperature increase to ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C (±10°C)
- door hold-open device

### **2** Storage cabinet for acids and alkalis

- 2 x 2 or 2 x 3 pull-out tray-shaped shelves, made from white PE
- Model GL with acrylic glass doors

### **3** Poison compartment with acrylic glass door

- Dividing shelf

4 Cover panel made from HPL-coated sheets in RAL 7035 - light grey

	Type 90 / 1200 KL1	Type 90 / 1200 KL2	Type 90 / 1200 KL3 GL
	1195 x 600 x 1935	1195 x 600 x 1935	1195 x 600 x 1935
	4	4	4
Pull-out shelves	4	6	6
Usable inner height (mm)	4 x 420	4 x 275 / 2 x 248	4 x 275 / 2 x 248
	325	335	340
Material inner fittings			
sheet steel	B80-2820-A	B80-2821-A	B80-2822-A
sheet steel	B80-2627-A	B80-2628-A	B80-2629-A
	Usable inner height (mm) Material inner fittings sheet steel	1195 x 600 x 1935         4         Pull-out shelves         4         Usable inner height (mm)         4 x 420         325         Material inner fittings         sheet steel         B80-2820-A	1195 x 600 x 1935     1195 x 600 x 1935       4     4       Pull-out shelves     4       6     Usable inner height (mm)     4 x 420       325     335       Material inner fittings     5heet steel       B80-2820-A     B80-2821-A

") plus cover panel: height 110 mm



### TYPE 90 / 1200 KL - KOMBILAB AS PER DIN EN 14470-1 (TYPE 90)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space.



### Safety cabinet (type 90) for flammable liquids as per DIN EN 14470-1

- Whole construction tested and approved by an authorized materials testing Institute as per DIN EN 14470-1 (type 90) with a fire resistance >90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in • RAL 7035 – light grey
- Inner body made from HPL-coated sheets in RAL 7035 light grey
- Stainless steel base plate Niro Rhombus
- Shelf height-adjustable at intervals of 64 mm
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust) air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock



Type 90 / 1200 KL9 GL, Article no. B80-2626-A



# please see page 136!

Type 90 / 1200 KL7, Article no. B80-2624-A

### With inner fittings:

### **1** Safety cabinet (type 90)

- 1 x base sump tray (sump capacity 22 liters) as per WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 3 x shelf
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- door hold-open device

### **2** Storage cabinet for acids and alkalis

- 2 x 2 or 2 x 3 pull-out tray-shaped shelves, made from white PE
- Model GL with acrylic glass doors

### Cover panel made from HPL-coated sheets in RAL 7035 - light grey

Model		Туре 90 / 1200 KL7	Туре 90 / 1200 KL8	Type 90 / 1200 KL9 GL
External dimensions* W x D x H (mm)		1195 x 600 x 1935	1195 x 600 x 1935	1195 x 600 x 1935
Doors		3	3	3
Design of acid / alkali cabinet	Pull-out shelves	4	6	6
	Usable inner height (mm)	4 x 420	4 x 275 / 2 x 248	4 x 275 / 2 x 248
Weight (kg)		426	432	437
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., door safety cabinet (type 90): RAL 7035 - light grey	sheet steel	B80-2618-A	B80-2619-A	B80-2620-A
Article no., door safety cabinet (type 90): RAL 1007 - daffodil yellow	sheet steel	B80-2624-A	B80-2625-A	B80-2626-A

" plus cover panel: height 110 mm





Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1, toxic and very toxic substances, acids and alkalis. Ideal combination for storage of various hazardous substances in a very small space. Store LABE

### **1** Safety cabinet (type 90) for flammable liquids as per DIN EN 14470-1

- Whole construction tested and approved by an authorized materials testing Institute as per DIN EN 14470-1 (type 90) with a fire resistance >90 minutes
- ◆ GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
   RAL 7035 light grey
- ◆ Inner body made from HPL-coated sheets in RAL 7035 light grey
- Stainless steel base plate Niro Rhombus
- Pull-out shelves with automatic return ensure great working safety
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock



Type 90 / 1200 KL10, Article no. B80-2621-A



Type 90 / 1200 KL10, Article no. B80-2621-A

# With inner fittings:

## Safety cabinet (type 90)

- 5 x pull-out shelves (AZW) as per WHG Ü-sign according
  - to StawaR
- Automatic thermal closing mechanism if fire occurs
- Door after temperature increase to ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- door hold-open device
- 2 Storage cabinet for acids and alkalis
  - 2 x 2 or 2 x 3 pull-out tray-shaped shelves, made from white PE
  - Model GL with acrylic glass doors
- 3 Cover panel made from HPL-coated sheets in RAL 7035 - light grey



Extraction fans please see page 136!

Model		Type 90 / 1200 KL10	Туре 90 / 1200 KL11	Type 90 / 1200 KL12 GL
External dimensions* W x D x H (mm)		1195 x 600 x 1935	1195 x 600 x 1935	1195 x 600 x 1935
Doors		3	3	3
Design of acid / alkali cabinet	Pull-out shelves	4	6	6
	Usable inner height (mm)	4 x 420	4 x 275 / 2 x 248	4 x 275 / 2 x 248
Weight (kg)		437	443	448
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., door safety cabinet (type 90): RAL 7035 - light grey	sheet steel	B80-2621-A	B80-2622-A	B80-2623-A
Article no., door safety cabinet (type 90): RAL 1007 - daffodil yellow	sheet steel	B80-2630-A	B80-2631-A	B80-2632-A

" plus cover panel: height 110 mm

### HAZARDOUS SUBSTANCES CABINETS - DIN EN 14470-1

### **PRACTICAL INFORMATION 6**

# Safety cabinets for flammable liquids as per DIN EN 14470-1

Hazardous substances may only be stored in workrooms if storage is compatible with the protection of workers and is carried out in special facilities!

- The classification of fire resistance was set to 4 types: Type 15 = ≥ 15 minutes\*
   Type 30 = ≥ 30 minutes
   Type 60 = ≥ 60 minutes
  - Type 90 = ≥ 90 minutes

As in Germany safety cabinets type 15 minutes are not approved and safety cabinets types 30 minutes and 60 minutes are only of limited use, **in Germany safety cabinets are confirmed with a fire resistance of 90 minutes (type 90) as a state of the art.** 

In many other European countries, however, is due to lack of legal regulations, the use of other type classes is also possible. That is why we also have low-class hazardous materials cabinets in the delivery program (for example type  $30 = \ge 30$  minutes).

\* deleted by revised version DIN EN 14470-1 : 2023

### Construction and testing of safety cabinets:

- The type examination of the entire cabinet construction area in a fire chamber of an independent materials testing institute (flame impingement) is in accordance with European standard test conditions.
- Deviations without comparative tests are limited to a reduction in height and width to a maximum of 100 mm and reduction in the depth of 150 mm.



Fig.: SiS Type 30 / 1200 GL (≥ 30 minutes - type-approved)

### Protective goals:

- Sufficient escape time for the employees in the working area.
- Firefighters and rescue teams must have a plenty of time to get into the working area before the hazardous substances stored in a safety cabinet turn a small erasable fire into an uncontrollable one.

Development and construction



Examination by an independent materials testing institute



<u>Approval /</u> certificates



### **PRACTICAL INFORMATION 6**

The operator of safety cabinets as per DIN EN 14470, part 1 is responsible for their proper use. The corresponding requirements are covered in the TRGS 510, annex 1 and represent the basic safety requirements for operating safety cabinets for the storage of flammable liquids.

### 1. Fire resistance capability:

Safety cabinets within the meaning of the TRGS 510 are particular devices with a fire resistance capability of > 90 minutes (as per DIN EN 14470-1) - technological state-of-the-art in Germany. In the case of fire they ensure sufficient time for escape and rescue (requirement as per DIN EN 14470-1). Safety cabinets with a fire resistance of less than 90 minutes (at least 30 minutes) may be used only to a limited extent (see page 100).

### 2. Installation and operation:

... to protect employees and third parties, in particular from fire and explosion hazards.

### 3. Sump capacity:

Each cabinet has to be equipped with a base sump tray acc. to the requirements of the StawaR, which has to contain at least 10% of the total storage volume of all storage containers and / or 110% of the largest container.

### 4. Self-closing doors:

Doors of safety cabinets as per DIN EN 14470-1 are fundamentally self-closing. All storeLAB<sup>®</sup> safety cabinets are equipped with a hold-open device (doors remain open during operation); this ensures safe operation, loading and removal. A thermal mechanism automatically closes the doors at a max. room temperature of 50°C.

### 5. Ventilation:

### With forced ventilation:

- Operation of safety cabinets have to ensure that air inlet and outlet system work constantly effective; the rate of air exchange when cabinet is closed has to be at least 10 times per hour. Herewith, the occurrence of a hazardous explosive atmospheres inside the cabinet is going to be avoided in normal operation.
- Ventilation has to be effective immediately above the base sump tray of the cabinet.
- The ventilation system has to discharge into the atmosphere at a non-hazardous location.
- Air inlet and outlet opening has to be automatically sealed at a max. temperature of 70°C (+/- 10°C).

### Without technical-forced ventilation:

• Avoidance of electrostatic charges - the cabinet has to be grounded.

### 6. Operation:

- Flammable liquids do not have to be stored together with hazardous substances which may lead to fires, e.g. self-reactive or pyrophoric substances.
- Hazardous substances with an ignition temperature below 200 °C (e.g. sulfur carbon) and hazardous substances classified with R12 (highly flammable) or H224 (extremely flammable) may only be stored in ventilated safety cabinets type 90 (DIN EN 14470-1).

### 7. Ex-zones:

The employer has to determine whether ex zones are to be defined in a hazard assessment. DGUV rule 113-001, provides information on this.

For example, the following requirements apply to a non-ventilated safety cabinet:

- Zone 1 inside of the cabinet
- Zone 2 around the cabinet in a radius of 2.5 m and up to a height of 0.5 m above the floor level







# Our new safety cabinets with 30 minutes fire resistance ...

# ... according to DIN EN 14470-1



### Practical information: Storage of flammable liquids in safety cabinets (Excerpt of TRGS 510, annex 1)

### A.1.2 General Requirements

- (2) Safety cabinets have to be designed, installed, operated and maintained in such a way as to guarantee the protection of employees and third persons, particularly against hazards due to fire or explosion.
- (3) The safety requirements for the design of safety cabinets shall be deemed to have been met if the cabinets at least satisfy the requirements under DIN EN 14470-1 and have a fire resistance rating of at least 90 minutes.
- (4) Safety cabinets with a fire resistance of less than 90 minutes but at least 30 minutes may be further used for combustible liquids, if
- 1. only one cabinet per fire fighting unit is installed; if fire fighting unit is larger than 100 m², one cabinet may be installed 100 m² each, or
- if fire fighting unit is equipped with an automatic fire alarm system and if there is an authorized plant fire brigade with max. response time of 5 minutes after the alarm has been occurred or if there is available an automatic fire-fighting system.

Brand quality MADE by LACONT

Hazardous substances cabinets (type 30) ...



Hazardous substances cabinets (type 30) width 600 mm page 102



store LAB

Hazardous substances cabinets (type 30) width 1200 mm





Hazardous substances cabinets (type 30) with fire safety glass door - width 600 mm

### page 104



Hazardous substances cabinets (type 30) with pull-out shelves - width 600 mm

### page 106



Hazardous substances underbench cabinets (type 30) - width 600 mm page 108



Hazardous substances cabinets (type 30) with fire safety glass doors - width 1200 mm

### page 105



Hazardous substances cabinets (type 30) with pull-out shelves - width 1200 mm

### page 107



Hazardous substances underbench cabinets (type 30) - width 1100 mm page 109





### SIS TYPE 30 / 600 AS PER DIN EN 14470-1 (TYPE 30)

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- SiS Type 30 / 600 with GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- SiS Type 30 / 600 with leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard

### With inner fittings:

### SiS Type 30 / 600 / SiS Type 30 / 600-1300

- 1 x base sump tray (sump capacity 22 liters) as per
   WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 3 x shelves (SiS Type 30 / 600-1300: 2 x shelves)
- door hold-open device



SiS Type 30 / 600-1300, Article no. B80-2608-A, door RAL 1007 - daffodil yellow, incl. 2 shelves, base sump tray and perforated cover plate





SiS Type 30 / 600, Article no. B80-2603-A, door RAL 1007 - daffodil yellow, incl. 3 shelves, base sump tray and perforated cover plate



Socle included, with removable panel

	SiS Type 30 / 600	SiS Type 30 / 600-1300
	595 x 595 x 1935	595 x 595 x 1315
	475 x 515 x 1600	475 x 515 x 1108
	1 (DIN right)	1 (DIN right)
	147	121
Material inner fittings		
sheet steel	B80-2601-A	B80-2607-A
sheet steel	B80-2603-A	B80-2608-A
	sheet steel	595 x 595 x 1935 475 x 515 x 1600 1 (DIN right) 147 Material inner fittings sheet steel B80-2601-A

Accessories	Material	Article no.	Article no.
Shelf	sheet steel	B80-2611-A	B80-2611-A



### SIS TYPE 30 / 1200 AS PER DIN EN 14470-1 (TYPE 30)

store LAB

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

### With inner fittings:

- 1 x base sump tray (sump capacity 33 liters) as per
   WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 3 x shelves
- door hold-open device



SIS Type 30/1200, Article no. B80-2600-A, doors RAL 7035 - light grey, incl. 3 shelves, base sump tray and perforated cover plate





Socle included, with removable panel

Model		SiS Type 30 / 1200
External dimensions W x D x H (mm)		1195 x 595 x 1935
Internal dimensions W x D x H (mm)		1075 x 515 x 1600
Doors		2
Weight (kg)		225
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2600-A
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2604-A

Accessories	Material	Article no.
Shelf	sheet steel	B80-2610-A



SIS Type 30/1200, Article no. B80-2604-A, doors RAL 1007 - daffodil yellow, incl. 3 shelves, base sump tray and perforated cover plate



### SIS TYPE 30 / 600 GL AS PER DIN EN 14470-1 (TYPE 30)

store LAB

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow with fire safety glass
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard

### With inner fittings:

- 1 x base sump tray (sump capacity 22 liters) as per
   WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 3 x shelves
- door hold-open device



SiS Type 30 / 600 GL, Article no. B80-2655-A, door RAL 1007 - daffodil yellow, incl. 3 shelves, base sump tray and perforated cover plate



Socle included, with removable panel





SiS Type 30 / 600 GL, Article no. B80-2655-A, door RAL 1007 - daffodil yellow, incl. 3 shelves, base sump tray and perforated cover plate



SiS Type 30 / 600 GL, Article no. B80-2654-A, door RAL 7035 - light grey, incl. 3 shelves, base sump tray and perforated cover plate

Model		SiS Type 30 / 600 GL
External dimensions W x D x H (mm)		595 x 595 x 1935
Internal dimensions W x D x H (mm)		475 x 515 x 1600
Door with fire safety glass		1 (DIN right)
Weight (kg)		190
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., door: RAL 7035 - light grey	sheet steel	B80-2654-A
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2655-A

Accessories	Material	Article no.
Shelf	sheet steel	B80-2611-A



### SIS TYPE 30 / 1200 GL AS PER DIN EN 14470-1 (TYPE 30)

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1



- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow with fire safety glass
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

### With inner fittings:

- 1 x base sump tray (sump capacity 33 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- ٠ 3 x shelves
- door hold-open device ٠



SiS Type 30 / 1200 GL, Article no. B80-2657-A, doors RAL 1007 - daffodil yellow, incl. 3 shelves, base sump tray and perforated cover plate



Socle included, with removable panel



Model		SiS Type 30 / 1200 GL
External dimensions W x D x H (mm)		1195 x 595 x 1935
Internal dimensions W x D x H (mm)		1075 x 515 x 1600
Doors with fire safety glass		2
Weight (kg)		298
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2656-A
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2657-A

Accessories	Material	Article no.
Shelf	sheet steel	B80-2610-A





SiS Type 30 / 1200 GL, Article no. B80-2656-A, doors RAL 7035 - light grey, incl. 3 shelves, base sump tray and perforated cover plate



### SIS TYPE 30 / 600 WITH PULL-OUT SHELVES AS PER DIN EN 14470-1 (TYPE 30)

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow optional with fire safety glass (GL)
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard

### With inner fittings:

- 1 x base sump tray (sump capacity 22 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- Either with 5, 4 or 3 pull-out shelves (AZW)\*
- door hold-open device

\* max. load 30 kg per shelf with uniformly distributed load



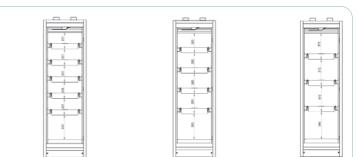
Hazardous substances cabinets (type 90) with pull-out shelves can be found from page 124!







SiS Type 30 / 600 VS3 GL, Article no. B80-2663-A, door RAL 7035 - light grey, incl. 3 pull-out shelves



Model		SiS Type 30 / 600 VS5	SiS Type 30 / 600 VS4	SiS Type 30 / 600 VS3
External dimensions W x D x H (mm)		595 x 595 x 1935	595 x 595 x 1935	595 x 595 x 1935
Internal dimensions W x D x H (mm)		475 x 515 x 1600	475 x 515 x 1600	475 x 515 x 1600
Door DIN right		1	1	1
Inner fittings		5 x AZW	4 x AZW	3 x AZW
Weight (kg) (without glass door / with glass door)		189 / 243	178 / 232	168 / 222
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., door: RAL 7035 - light grey	sheet steel	B80-2670-A	B80-2666-A	B80-2662-A
Article no., door: RAL 7035 - light grey GL	sheet steel	B80-2671-A	B80-2667-A	B80-2663-A
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2672-A	B80-2668-A	B80-2664-A
Article no., door: RAL 1007 - daffodil yellow GL	sheet steel	B80-2673-A	B80-2669-A	B80-2665-A

Accessory	Material	Article no.
Perforated cover plate for pull-out shelf	sheet steel	B80-2674-A



Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow optional with fire safety glass (GL)
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

### With inner fittings:

- 1 x base sump tray (sump capacity 33 liters) as per
  - WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- Either with 5, 4 or 3 pull-out shelves (AZW)\*
- door hold-open device

\* max. load 30 kg per shelf with uniformly distributed load

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SiS Type 30 / 1200 VS3, Article no. B80-2675-A, doors RAL 7035 - light grey, incl. 3 pull-out shelves

Extract fans please page 1	see			
Model		SiS Type 30 / 1200 VS5	SiS Type 30 / 1200 VS4	SiS Type 30 / 1200 VS3
External dimensions W x D x H (mm)		1195 x 595 x 1935	1195 x 595 x 1935	1195 x 595 x 1935
Internal dimensions W x D x H (mm)		1075 x 505 x 1600	1075 x 505 x 1600	1075 x 505 x 1600
Doors		2	2	2
Inner fittings		5 x AZW	4 x AZW	3 x AZW
Weight (kg) (without glass doors / with glass doors)		273 / 346	259 / 332	245 / 318
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2683-A	B80-2679-A	B80-2675-A
Article no., doors: RAL 7035 - light grey GL	sheet steel	B80-2684-A	B80-2680-A	B80-2676-A
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2685-A	B80-2681-A	B80-2677-A
Article no., doors: RAL 1007 - daffodil yellow GL	sheet steel	B80-2686-A	B80-2682-A	B80-2678-A

Accessory	Material	Article no.
Perforated cover plate for pull-out shelf	sheet steel	B80-2687-A



### AUS TYPE 30 / 600 AS PER DIN EN 14470-1 (TYPE 30)

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock

### With inner fittings:

- 1 x base sump tray (BW) as per WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- door hold-open device



AUS Type 30 / 600 FT, door RAL 7035, Article no. B80-2639-A

AUS Type 30 / 600 FT, door RAL 1007, Article no. B80-2640-A



AUS Type 30 / 600 FT, door RAL 7035, Article no. B80-2639-A





AUS Type 30 / 600 FT, door RAL 1007, Article no. B80-2640-A

Model		AUS Type 30 / 600 FT
External dimensions W x D x H (mm)		600 x 570 x 600
Internal dimensions W x D x H (mm)		472 x 470 x 425
Sump capacity (BW) (I)		12
Door		1 DIN right
Weight (kg)		63
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., door: RAL 7035 - light grey	sheet steel	B80-2639-A
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2640-A
Accessories	Material	Article no.
Shelf	sheet steel	B80-2641-A
Socle height 35 mm	B1	B80-2642-A



#### AUS TYPE 30 / 1100 AS PER DIN EN 14470-1 (TYPE 30)

Approved for the restricted storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 30) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 30) with a fire resistance >30 minutes
- GS-approved safety (GS-sign)
- Body made from B1 material RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Height-adjustable shelves at intervals of 32 mm
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### With inner fittings:

- ◆ 1 x base sump tray (BW) as per WHG Ü-sign
- according to StawaR
- 1 x perforated base tray cover as 1st storing level
- door hold-open device





AUS Type 30 / 1100 FT, doors RAL 1007, Article no. B80-2609-A



AUS Type 30 / 1100 FT, doors RAL 1007, Article no. B80-2609-A



AUS Type 30 / 1100 FT, doors RAL 7035, Article no. B80-2602-A



Model		AUS Type 30 / 1100 FT
External dimensions W x D x H (mm)		1100 x 570 x 600
Internal dimensions W x D x H (mm)		986 x 455 x 425
Sump capacity (BW) (l)		26
Doors		2
Weight (kg)		110
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2602-A
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2609-A
Accessories	Material	Article no.
Shelf	sheet steel	B80-2688-A
Socle height 35 mm	B1	B80-2869-A

#### PROFESSIONAL MAINTENANCE OF STORELAB<sup>®</sup> - SAFETY CABINETS

According to §4 ArbStättV the employer is obliged to maintain all safety devices periodically in order to ensure their efficiency. If a risk assessment according to §3 BetrSichV defines no other test intervals, we recommend the safety inspection for your cabinets once a year.

#### Our know-how is your safety

We would like to support you in the implementation of all relevant regulations and check your safety cabinets regularly to their proper functioning. This guarantees a high standard of safety and a long durability of your safety cabinets.









#### The cabinet maintenance at a glance:

- Individual check or maintenance contract
- Qualified support by service technicians
- Review of all safety-relevant components
- Immediate correction of minor defects
- Exhaust air check
- Preparation of a service report
- Attaching inspection plate after successful maintenance

#### **Review of filter attachments:**

When using a filter attachment, replacement of the filter system at regular intervals according to the display of the device is neccessary. We also offer single checks or a service contract, suggestive in combination with the maintenance of your safety cabinet. Our service for you:

- Filter attachment check
- Replacement of the filter system
- Recreation of proper function
- Professional disposal of the contaminated filters





#### Ask for our maintenance flyer!



#### E-Mail to: info@lacont.de

Brand quality MADE by LACONT

Hazardous substances cabinets (type 90) ...



Hazardous substances cabinets (type 90) width 600 / 900 / 1200 / 1400 mm page 112-115



Hazardous substances drum cabinets (type 90) width 900 / 1550 mm page 116-123

store **LAB** 



Hazardous substances cabinets (type 90) with pull-out shelves width 600 / 1200 mm

page 124-127



Hazardous substances underbench cabinets (type 90) width 600 / 880 / 1100 / 1400 mm

page 128-135



Extraction fans page 136



Hazardous substances filter attachment page 137



Hazardous substances cabinets (type 90) for airbag width 900 mm page 138



Hazardous substances cabinets for gas cylinders (G 30) page 141



#### SIS TYPE 90 / 600 AS PER DIN EN 14470-1 (TYPE 90)

store LAB

#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 - light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil vellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Shelves height-adjustable at intervals of 64 mm
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to  ${\leq}50^\circ\!\mathrm{C}$  and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard (door hinged left on request)

Model		SiS Type 90 / 600	SiS Type 90 / 600-1300
External dimensions W x D x H (mm)		595 x 598 x 1935	595 x 598 x 1315
Internal dimensions W x D x H (mm)		492 x 430 x 1700	492 x 430 x 1080
Door		1 (DIN right)	1 (DIN right)
Weight (kg)		306	225
Outer body: RAL 7035 - light grey	Material		
	inner fittings		
Article no., door: RAL 7035 - light grey	sheet steel	B80-2000-D	B80-2529-B
Article no., door: RAL 7035 - light grey	stainless steel V2A	B80-2527-B	B80-2530-B
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2100-G	B80-2531-G
Article no., door: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2528-G	B80-2532-G

Accessories	Material	Article no.
Shelf	sheet steel	B80-2050-D
Shelf	stainless steel V2A	B80-2533-B
PE-insert for base sump tray, for storage of aggressive media		B80-2060-D
PE-insert for shelf, for storage of aggressive media		B80-2070-D
Compartment for documents		B80-2007-A

#### Safe compartments

#### For storage of small amounts of toxic and very toxic substances in

#### storeLAB<sup>®</sup> safety cabinets

- Spatial separation from flammable liquids
- Door with cylinder lock
- Powder-coated sheet steel in RAL 7035 light grey
- With installation accessories for fixing in position, standing on shelf

Model	SF 1
External dimensions W x D x H (mm)	447 x 370 x 436
Door	1
Article no.	B80-2517-B



SiS Type 90 / 600-1300, Article no. B80-2529-B, RAL 7035, incl. 2 shelves, base sump tray and perforated cover plate



SiS Type 90 / 600, Article no. B80-2100-G, RAL 1007, incl. 3 shelves, base sump tray and perforated cover plate

#### With inner fittings:

1 x base sump tray (sump capacity
 22 liters) as per WHG - Ü-sign

#### according to StawaR

- 1 x perforated base tray cover as 1st storing level
- 3 x shelves (Type 90 / 600-1300 2 x shelves)
- door hold-open device





SF 1, RAL 7035, Article no. B80-2517-B



#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1







- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- ٠ Stainless steel base plate - Niro Rhombus
- Shelves height-adjustable at intervals of 64 mm
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature
  - increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- ٠ Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### Safe compartments

#### For storage of small amounts of toxic and very toxic substances in storeLAB® safety cabinets

- Spatial separation from flammable liquids
- Door with cylinder lock
- Powder-coated sheet steel in ٠ RAL 7035 - light grey
- With installation accessories for fixing in position, standing on shelf



SF 1, RAL 7035, Article no. B80-2517-B

Model	SF 1
External dimensions W x D x H (mm)	447 x 370 x 436
Door	1
Article no.	B80-2517-B



Extraction fans please see page 136!



SiS Type 90 / 900, Article no. B80-2521-G, RAL 1007, incl. 3 shelves, base sump tray and perforated cover plate

#### With inner fittings:

◆ 1 x base sump tray (sump capacity 29 liters) as per

#### WHG - Ü-sign according to StawaR

- 1 x perforated base tray cover as 1st storing level
- 3 x shelves

PE-insert for shelf, for storage of aggressive media

Compartment for documents

door hold-open device

Model		SiS Type 90 / 900
External dimensions W x D x H (mm)		900 x 598 x 1935
Internal dimensions W x D x H (mm)		797 x 430 x 1700
Doors		2
Weight (kg)		395
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2519-B
Article no., doors: RAL 7035 - light grey	stainless steel V2A	B80-2520-B
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2521-G
Article no., doors: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2522-G
Accessories	Material	Article no.
Shelf	sheet steel	B80-2523-B
Shelf	stainless steel V2A	B80-2524-B
PE-insert for base sump tray, for storage of aggressive media		B80-2525-B

B80-2526-B B80-2007-A



#### SIS TYPE 90 / 1200 AS PER DIN EN 14470-1 (TYPE 90)

#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Shelves height-adjustable at intervals of 64 mm
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to  $\leq$ 50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### With inner fittings:

- 1 x base sump tray (sump capacity 33 liters) as per
   WHG Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level
- 3 x shelves (SiS Type 90 / 1200-1300 2 x shelves)
- door hold-open device

#### Safe compartments

## For storage of small amounts of toxic and very toxic substances in storeLAB<sup>®</sup> safety cabinets

- Spatial separation from flammable liquids
- Door(s) with cylinder lock
- Powder-coated sheet steel in RAL 7035 light grey
- With installation accessories for fixing in position, standing on shelf



SF 2, RAL 7035, Article no. B80-2518-B

Model	<b>SF</b> 1	SF 2
External dimensions W x D x H (mm)	447 x 370 x 436	1000 x 370 x 436
Door(s)	1	2
Article no.	B80-2517-B	B80-2518-B





SiS Type 90 / 1200, Article no. B80-2102-G, RAL 1007, incl. 3 shelves, base sump tray and perforated cover plate

Model		SiS Type 90 / 1200	SiS Type 90 / 1200-1300
External dimensions W x D x H	l (mm)	1190 x 598 x 1935	1190 x 598 x 1315
Internal dimensions W x D x H	(mm)	1087 x 430 x 1700	1087 x 430 x 1080
Doors		2	2
Weight (kg)		505	380
Outer body:	Material		
RAL 7035 - light grey	inner fittings		
Article no., doors:			
RAL 7035 - light grey	sheet steel	B80-2002-D	B80-2512-B
Article no., doors:			
RAL 7035 - light grey	stainless steel V2A	B80-2510-B	B80-2513-B
Article no., doors:			
RAL 1007 - daffodil yellow	sheet steel	B80-2102-G	B80-2514-G
Article no., doors:			
RAL 1007 - daffodil yellow	stainless steel V2A	B80-2511-G	B80-2515-G

Accessories	Material	Article no.
Shelf	sheet steel	B80-2052-D
Shelf	stainless steel V2A	B80-2516-B
PE-insert for base sump tray,		
for storage of aggressive media		B80-2062-D
PE-insert for shelf,		
for storage of aggressive media		B80-2072-D
Compartment for documents		B80-2007-A



store LAB

#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 - light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Shelves height-adjustable at intervals of 64 mm
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### With inner fittings:

- 1 x base sump tray (sump capacity 34 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated base tray cover as 1st storing level ٠
- 3 x shelves ٠

1

٠ door hold-open device









Extraction fans please see page 136!

Compartment for documents, Article no. B80-2007-A

Model		SiS Type 90 / 1400
External dimensions W x D x H (mm)		1400 x 598 x 1935
Internal dimensions W x D x H (mm)		1297 x 430 x 1700
Doors		2
Weight (kg)		615
Outer body: RAL 7035 - light grey	Material inner fittings	
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2701-B
Article no., doors: RAL 7035 - light grey	stainless steel V2A	B80-2702-B
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2703-G
Article no., doors: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2704-G
Accessories	Material	Article no.
Shelf	sheet steel	B80-2705-B
Shelf	stainless steel V2A	B80-2706-B
PE-insert for base sump tray, for storage of aggressive media		B80-2707-B
PE-insert for shelf, for storage of aggressive media		B80-2708-B
Compartment for documents		B80-2007-A



#### SIS-FAS Type 90 / 900 AS PER DIN EN 14470-1 (TYPE 90)

## For storage of flammable liquids in a standing 200 liter drum inside buildings

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance >90 minutes
- Insulation according to DIN 4102
- Outer body from powder-coated sheet steel in RAL 7035 light grey, doors RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Base sump tray made from 3 mm sheet steel, painted in RAL 7035 light grey, as per WHG - Ü-sign according to StawaR
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Ground clamp as standard
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors with cylinder lock
- door hold-open device



Suitable for installation directly at workplace !



Article no. B80-2713-A



with removable panel

Model	SiS-FAS Type 90 / 900-EW
External dimensions W x D x H (mm)	900 x 900 x 1935
Internal dimensions W x D x H (mm)*	797 x 735 x 1290
Doors	2
Capacity 200 liter drum, standing	1
Sump capacity of base sump tray (I)	220
Weight (kg)	535
Article no., outer body: RAL 7035 - light grey,	
doors: RAL 1007 - daffodil yellow	B80-2863-A

\* from upper edge of base sump tray

Accessories	Article no.
Grid, max. load 75 kg	B80-2873-A
PE-insert for base sump tray, for storage of aggressive media	B80-2874-A
Socle, tested acc. to type 90 cabinets W x D x H (mm) = 900 x 900 x 113	B80-2713-A
Grounding clamp	B80-2996-A











- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance >90 minutes
- Insulation according to DIN 4102
- Outer body from powder-coated sheet steel in RAL 7035 light grey, doors RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035

For the horizontal storage of flammable liquids in

max. 3 x 60 liter steel drums inside buildings

- Stainless steel base plate Niro Rhombus
- Base sump tray made from 3 mm sheet steel, painted in RAL 7035 light grey, as per WHG - Ü-sign according to StawaR
- All shelving fittings galvanized
- Storage of up to 3 x 60 liter steel drums possible, alternatively with grid for storing small containers or canisters
- Storage levels height-adjustable at intervals of 25 mm
- Max. load per storage level 200 kg
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors with cylinder lock
- door hold-open device





SiS-FAS Type 90 / 900-260 GR, Article no. B80-2876-A



SiS-FAS Type 90 / 900-360, Article no. B80-2875-A



SiS-FAS Type 90 / 900-160 GR, Article no. B80-2877-A

Model	SiS-FAS Type 90 / 900-360	SiS-FAS Type 90 / 900-260 GR	SiS-FAS Type 90 / 900-160 GR	SiS-FAS Type 90 / 900 KG-GR
External dimensions W x D x H (mm)	900 x 900 x 1935	900 x 900 x 1935	900 x 900 x 1935	900 x 900 x 1935
Internal dimensions W x D x H (mm)*	797 x 735 x 1580	797 x 735 x 1580	797 x 735 x 1580	797 x 735 x 1580
Doors	2	2	2	2
Capacity 60 liter steel drum, lying	3	2	1	-
No. of grids for storing				
small containers	-	1	2	3
Sump capacity of base sump tray (I)	67	67	67	67
Weight (kg)	530	530	530	530
Article no.,				
outer body: RAL 7035 - light grey,				
doors: RAL 1007 - daffodil yellow	B80-2875-A	B80-2876-A	B80-2877-A	B80-2872-A
* from upper edge of base sump tray				
Accessory	Article no.	Article no.	Article no.	Article no.
Additional grid-type storage level	B80-2986-A	B80-2986-A	B80-2986-A	B80-2986-A
Grounding clamp	B80-2996-A	B80-2996-A	B80-2996-A	B80-2996-A



#### SIS-FAS Type 90 / 1550 AS PER DIN EN 14470-1 (TYPE 90)

#### For storage of flammable liquids in containers and drums up to 200 liters inside buildings

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in RAL 7035 - light grey, doors RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Base sump tray made from 3 mm sheet steel, painted in RAL 7035 light grey, as per WHG - Ü-sign according to StawaR
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Ground clamp as standard
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors with cylinder lock
- Door inside clearance width 1310 mm
- Internal emergency opening device
- door hold-open device



SiS-FAS Type 90 / 1550-960, Article no. B80-2854-A



Suitable for installation directly at workplace !





SiS-FAS Type 90 / 1550-CW, Article no. B80-2850-A



SiS-FAS Type 90 / 1550 KG-GR, Article no. B80-2857-A



Socle, Article no. B80-2714-A



with removable panel



emergency opening device



Grounding clamp, Article no. B80-2996-A



Grounding clamp

B80-2996-A





#### SIS-FAS Type 90 / 1550 AS PER DIN EN 14470-1 (TYPE 90)

store LAB

## For horizontal storage of flammable liquids of max. 9 x 60 liter steel drums inside buildings

- Base sump tray made from 3 mm sheet steel, painted in RAL 7035 - light grey, as per WHG - Ü-sign according to StawaR
- Sump capacity 220 liters
- With grid support projecting in front of shelving rack
- All shelving fittings galvanized
- Storage for up to 9 x 60 liter steel drums is possible, alternatively grid storage levels for storing small containers
- Storage levels height-adjustable at 25 mm intervals
- Max. load per storage level 200 kg
- door hold-open device



SiS-FAS Type 90 / 1550-960, Article no. B80-2854-A



Model SiS-FAS Type 90 / 1550-960 SiS-FAS Type 90 / 1550-660 GR SiS-FAS Type 90 / 1550-360 GR 1550 x 1025 x 2200 1550 x 1025 x 2200 External dimensions W x D x H (mm) 1550 x 1025 x 2200 Internal dimensions W x D x H (mm)\* 1450 x 870 x 1714 1450 x 870 x 1714 1450 x 870 x 1714 Doors 2 2 2 Capacity 60 liter steel drum, horizontal 9 6 3 No. of grids for storing small containers 1 2 Sump capacity of base sump tray (I) 220 220 220 Weight (kg) 1040 1040 1040 Article no., outer body: RAL 7035 - light grey, doors: RAL 1007 - daffodil yellow B80-2854-A B80-2855-A B80-2856-A \* from upper edge of base sump tray Accessory Article no. Socle, tested acc. to type 90 cabinets W x D x H (mm) = 1550 x 1025 x 113 B80-2714-A Grounding clamp B80-2996-A

Extraction fans please see

page 136!



#### SIS-FAS Type 90 / 1550 AS PER DIN EN 14470-1 (TYPE 90)

#### For storage of flammable liquids in small containers inside buildings

- Base sump tray made from 3 mm sheet steel, galvanized, as per WHG - Ü-sign according to StawaR
- Sump capacity 80 liters
- All shelving fittings galvanized
- Max. load per storage level 200 kg with uniformly distributed load
- Storage levels height-adjustable at 25 mm intervals
- door hold-open device ٠





Article no. B80-2857-A

Model	SiS-FAS Type 90 / 1550 KG-GR
External dimensions W x D x H (mm)	1550 x 1025 x 2200
Internal dimensions W x D x H (mm)	1450 x 870 x 1955
Doors	2
Type of lowest storage level	Base sump tray
Other storage levels	4 x grid-type shelves
Sump capacity of base sump tray (I)	80
Weight (kg)	1000
Article no., outer body: RAL 7035 - light grey,	
doors: RAL 1007 - daffodil yellow	B80-2857-A
Accessories	Article no.
Additional grid storage level	B80-2858-A
Socle, tested acc. to type 90 cabinets W x D x H (mm) = 1550 x 1025 x 113	B80-2714-A
Grounding clamp	B80-2996-A

SiS-FAS Type 90 / 1550 KG-GR is used wherever other safety cabinets cannot provide sufficient storage space.





emergency opening device



#### SIS-FAS Type 90 / 1550-1430 AS PER DIN EN 14470-1 (TYPE 90)

## For storage of flammable liquids in small containers, drums and KTC / IBC indoors

- Whole construction tested by an authorized material testing institute in accordance with DIN EN 14470-1 (type 90) with fire resistance of > 90 minutes
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in RAL 7035 - light grey, doors RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Base sump tray made from 3 mm sheet steel, as per WHG - Ü-sign according to StawaR
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Ground clamp as standard
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors with cylinder lock
- Door inside clearance width 1310 mm
- Internal emergency opening device
- door hold-open device



SiS-FAS Type 90 / 1550-1430 H, Article no. B80-2982-A













Socle as standard

with removable panel



#### SIS-FAS Type 90 / 1550-1430 AS PER DIN EN 14470-1 (TYPE 90)

For storage of flammable liquids concerning 4 vertical 200 liter drums, up to 4 horizontal 200 liter drums or 1 piece KTC / IBC until 1000 liters indoors

- Base sump tray made from 3 mm sheet steel with grid support; as per WHG - Ü-sign according to StawaR
- Base sump tray, painted in RAL 7035 light grey with sump capacity of 220 or 1000 liter
- Ground clamp as standard
- door hold-open device









SiS-FAS Type 90 / 1550-1430 K, Article no. B80-2983-A

Model	SiS-FAS Type 90 / 1550-1430	SiS-FAS Type 90 / 1550-1430 H	SiS-FAS Type 90 / 1550-1430 K
External dimensions W x D x H (mm)	1550 x 1430 x 2315	1550 x 1430 x 2315	1550 x 1430 x 2315
Internal dimensions W x D x H (mm)*	1450 x 1275 x 1761	1450 x 1275 x 1761	1450 x 1275 x 1276
Doors	2	2	2
Capacity 200 liter drums (vertical)	4	-	4
Capacity 200 liter drums (horizontal)	-	4	-
Capacity KTC / IBC	-	-	1
Sump capacity of base sump tray (I)	220	220	1000
Weight (kg)	1450	1485	1620
Article no., outer body: RAL 7035 - light grey,			
doors: RAL 1007 - daffodil yellow	B80-2981-A	B80-2982-A	B80-2983-A
* from upper edge of base sump tray			
Accessories	Article no.	Article no.	Article no.
Grid, max. load 75 kg			
W x D (mm) = 1450 x 500	B80-2852-A	-	-
PE-insert for base sump tray,			
for storage of aggressive media	B80-2984-A	B80-2984-A	B80-2985-A
Grounding clamp	B80-2996-A	B80-2996-A	B80-2996-A



#### SIS TYPE 90 / 600 VS WITH PULL-OUT SHELVES AS PER DIN EN 14470-1 (TYPE 90)

#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Pull-out shelves with automatic return ensure high working safety
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Door with cylinder lock
- Door hinged right as standard

#### With inner fittings:

\* max load 30 kg per shelf with

Either with 6, 5 or 4 pull-out shelves (AZW)\* as per

- WHG Ü-sign according to StawaR
- door hold-open device



SiS Type 90 / 600 VS6, Article no. B80-2570-B, RAL 7035, incl. 6 pull-out shelves

* max. load 30 kg per shelf with uniformly distributed load	Extraction fans please see page 136!	246*246*246*246*246*246*	301 × 301 ×	384 384 384
Model		SiS Type 90 / 600 VS6	SiS Type 90 / 600 VS5	SiS Type 90 / 600 VS4
External dimensions W x D x H (mm)		595 x 598 x 1935	595 x 598 x 1935	595 x 598 x 1935
Internal dimensions W x D x H (mm)		492 x 430 x 1740	492 x 430 x 1740	492 x 430 x 1740
Door DIN right		1	1	1
Inner fittings / Sump capacity (I)		6 x AZW / 6 x 7	5 x AZW / 5 x 7	4 x AZW / 4 x 7
Weight (kg)		317	313	309
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., door: RAL 7035 - light grey	sheet steel	В80-2570-В	B80-2574-B	B80-2578-B
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2572-G	B80-2576-G	B80-2580-G





#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 - light grey, door either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Pull-out shelves with automatic return ensure high working safety
- Automatic thermal closing mechanism if fire occurs
  - Door after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Safety cabinets including interior fittings according to type description
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- ٠ Leveling feets for installing cabinet horizontally
- ٠ Door with cylinder lock
- Door hinged right as standard

#### With inner fittings:

- Either with 4 or 3 pull-out shelves (AZW)\* as per WHG - Ü-sign according to StawaR
- Disposal compartment (ESF)
- door hold-open device ٠







SiS Type 90 / 600 VS4-ES, Article no. B80-2588-B, RAL 7035, incl. 4 pull-out shelves and 1 disposal compartment

* max. load 30 kg per shelf with uniformly distributed load		550 329 329	550
Model		SiS Type 90 / 600 VS3-ES	SiS Type 90 / 600 VS4-ES
External dimensions W x D x H (mm)		595 x 598 x 1935	595 x 598 x 1935
Internal dimensions W x D x H (mm)		492 x 430 x 1740	492 x 430 x 1740
Door DIN right		1	1
Inner fittings / Sump capacity (I)		1 x ESF / 1 x 22	1 x ESF / 1 x 22
		3 x AZW / 3 x 7	4 x AZW / 4 x 7
Weight (kg)		314	318
Outer body: RAL 7035 - light grey	Material inner fittings		
Article no., door: RAL 7035 - light grey	sheet steel	B80-2584-B	B80-2588-B
Article no., door: RAL 1007 - daffodil yellow	sheet steel	B80-2586-G	B80-2590-G

Accessories	Material	Article no.
Perforated cover plate for pull-out shelf	sheet steel	B80-2582-B
Perforated cover plate for disposal compartment	sheet steel	B80-2594-B

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#### SIS TYPE 90 / 1200 VS WITH PULL-OUT SHELVES AS PER DIN EN 14470-1 (TYPE 90)

Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Pull-out shelves with automatic return ensure high working safety
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to  ${\leq}50^\circ\text{C}$  and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### With inner fittings:

- Either with 6, 5 or 4 pull-out shelves (AZW)\* as per
  - WHG Ü-sign according to StawaR
- door hold-open device

\* max. load 30 kg per shelf with uniformly distributed load

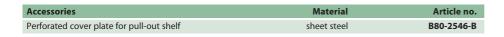






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Model		SiS Type 90 / 1200 VS6	SiS Type 90 / 1200 VS5	SiS Type 90 / 1200 VS4
External dimensions W x D x H (mm)		1190 x 598 x 1935	1190 x 598 x 1935	1190 x 598 x 1935
Internal dimensions W x D x H (mm)		1087 x 430 x 1740	1087 x 430 x 1740	1087 x 430 x 1740
Doors		2	2	2
Inner fittings / Sump capacity (I)		6 x AZW / 6 x 17	5 x AZW / 5 x 17	4 x AZW / 4 x 17
Weight (kg)		522	514	506
Outer body: RAL 7035 - light grey	Material inner fittings			
Article no., doors: RAL 7035 - light grey	sheet steel	B80-2534-B	B80-2538-B	B80-2542-B
Article no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2536-G	B80-2540-G	B80-2544-G





SiS Type 90 / 1200 VS6, Article no. B80-2534-B, RAL 7035, incl. 6 pull-out shelves



#### Approved for storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 - light grey, doors either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- ٠ Stainless steel base plate - Niro Rhombus
- Pull-out shelves with automatic return ensure high working safety ٠
- Tray-shaped shelves height-adjustable at intervals of 64 mm
- Automatic thermal closing mechanism if fire occurs
  - Doors after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction on cabinet roof
- Operation complies with TRGS 510 (approved even without exhaust) air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Leveling feets for installing cabinet horizontally
- Doors with cylinder lock

#### With inner fittings:

- Either with base sump tray (BW), perforated cover plate (LB) and tray-shaped shelves (EN), pull-out shelves (AZW)\*, disposal compartment (ESF) as per
  - WHG Ü-sign according to StawaR

\* max. load 30 kg per shelf with uniformly distributed load

- With central dividing panel ٠
- ٠ door hold-open device

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odel		SiS Type 90 / 1200 VS MI	SiS Type 90 / 1200 VS MI	SiS Type 90 / 1200 ES MI	SiS Type 90 / 1200 ES MI
ternal dimensions W x D x H (mm)		1190 x 598 x 1935			
ternal dimensions W x D x H (mm)		1087 x 430 x 1740			
Dors		2	2	2	2
ner fittings / Sump capacity (l)		Dividing	Dividing	Dividing	Dividing
		panel	panel	panel	panel
		left: 6 x AZW / 6 x 7	left: 6 x AZW / 6 x 7	left: 6 x AZW / 6 x 7	left: 1 x ESF / 1 x 22
		right: 6 x AZW / 6 x 7	right: 3 x EN	right: 1 x ESF / 1 x 22	3 x AZW / 3 x 7
			1 x BW / 1 x 22	3 x AZW / 3 x 7	right: 1 x ESF / 1 x 22
			1 x LB		3 x AZW / 3 x 7
eight (kg)		532	521	529	526
uter body: RAL 7035 - light grey	Material inner fittings				
rticle no., doors: RAL 7035 - light grey	sheet steel	B80-2548-B	B80-2552-B	B80-2556-B	B80-2560-B
rticle no., doors: RAL 1007 - daffodil yellow	sheet steel	B80-2550-G	B80-2554-G	B80-2558-G	B80-2562-G

Accessories	Material	Article no. (Model VS)	Article no. (Model ES)
Perforated cover plate for pull-out shelf	sheet steel	B80-2582-B	B80-2582-B
Perforated cover plate for disposal compartment	sheet steel	-	B80-2594-B



store LAB

fans please see page 136!





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Article no. B80-2556-B, RAL 7035, incl. 6 pull-out shelves (left), 3 pull-out shelves and 1 disposal compartment (right)





#### AUS TYPE 90 / 600-500 AS PER DIN EN 14470-1 (TYPE 90)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
- RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door / drawer after temperature increase to  ${\leq}50^{\circ}{\rm C}$  and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door / drawer\* with cylinder lock
- Door type FT hinged right as standard
- Inner width with pulled-out drawer approx. 250 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### AUS Type 90 / 600-500 FT

- 1 x base sump tray (sump capacity 12 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated cover plate as 1st storing level

#### AUS Type 90 / 600-500 SF

- 1 x base sump tray (sump capacity 12 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated cover plate as 1st storing level





Article no. B80-2897-G, with additional shelf, available as accessory



AUS Type 90 / 600-500 FT, Article no. B80-2897-G



AUS Type 90 / 600-500 SF, Article no. B80-2895-G

Model			AUG True 00 / 600 500 55
Model		AUS Type 90 / 600-500 FT	AUS Type 90 / 600-500 SF
External dimensions W x D x H (mm)		577 x 500 x 600	577 x 500 x 600
Internal dimensions W x D x H (mm)		485 x 362 x 514	485 x 362 x 514
Door hinged right		1	-
Drawer		-	1
Weight (kg)		89	88
Outer body: RAL 7035 - light grey	Material inner fittings		
Article no., door / drawer: RAL 7035 - light grey	sheet steel	B80-2897-A	B80-2895-A
Article no., door / drawer: RAL 7035 - light grey	stainless steel V2A	B80-2921-A	B80-2922-A
Article no., door / drawer: RAL 1007 - daffodil yellow	sheet steel	B80-2897-G	B80-2895-G
Article no., door / drawer: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2921-G	B80-2922-G
Accessories	Material	Article no.	Article no.
Shelf	sheet steel	B80-2933-A	-
Shelf	stainless steel V2A	B80-2934-A	-
additional pull-out shelf	sheet steel	-	B80-2929-A



Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- ◆ GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
  - RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door / drawer after temperature increase to  ${\leq}50^{\circ}{\rm C}$  and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door / drawer\* with cylinder lock
- Door type FT hinged right as standard
- Inner width with pulled-out drawer approx. 320 mm

door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

### With inner fittings:

#### AUS Type 90 / 600 FT

- 1 x base sump tray (sump capacity 12 liters) as per WHG - Ü-sign according StawaR
- 1 x perforated cover plate as 1st storing level

#### AUS Type 90 / 600 SF

- 1 x base sump tray (sump capacity 12 liters) as per WHG - Ü-sign according to StawaR
- 1 x perforated cover plate as 1st storing level



AUS Type 90 / 600 FT, Article no. B80-2800-A, with perforated socle

with perforated socle, available as accessory

AUS Type 90 / 600 SF, Article no. B80-2801-A, with perforated socle, available as accessory

Model		AUS Type 90 / 600 FT	AUS Type 90 / 600 SF
External dimensions W x D x H (mm)		577 x 570 x 600	577 x 570 x 600
Internal dimensions W x D x H (mm)		485 x 432 x 514	485 x 432 x 514
Door hinged right		1	-
Drawer		-	1
Weight (kg)		92	95
Outer body: RAL 7035 - light grey	Material inner fittings		
Article no., door / drawer: RAL 7035 - light grey	sheet steel	B80-2800-A	B80-2801-A
Article no., door / drawer: RAL 7035 - light grey	stainless steel V2A	B80-2919-A	B80-2920-A
Article no., door / drawer: RAL 1007 - daffodil yellow	sheet steel	B80-2800-G	B80-2801-G
Article no., door / drawer: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2919-G	B80-2920-G
Accessories	Material	Article no.	Article no.
Shelf	sheet steel	B80-2802-A	-
Shelf	stainless steel V2A	B80-2803-A	-
additional pull-out shelf	sheet steel	-	B80-2927-A
additional pull-out shelf	stainless steel V2A	-	B80-2928-A
Socle height 35 mm	sheet steel	B80-2804-A	B80-2804-A
Socle, perforated height 35 mm	sheet steel	B80-2805-A	B80-2805-A



#### AUS TYPE 90 / 880-500 AS PER DIN EN 14470-1 (TYPE 90)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
- RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door/s and drawer/s after temperature increase to  ${\leq}50^\circ{\rm C}$  and
  - Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door/s / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 250 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### All models

- Base sump tray (sump capacity type FT 1 x 18 liter, type SF 1 x 18 liter, type FT SF 2 x 11 liter,
  - type SF SF 2 x 11 liter) as per
  - WHG Ü-sign according to

#### StawaR

 Perforated cover plate as 1st storing level



AUS Type 90 / 880-500 SF, Article no. B80-2902-G



Shelf	sheet steel	B80-2937-A	-	B80-2939-A	-
Shelf	stainless steel V2A	B80-2938-A	-	B80-2940-A	-
additional pull-out shelf	sheet steel	-	B80-2941-A	B80-2943-A	B80-2943-A
additional pull-out shelf	stainless steel V2A	-	B80-2942-A	B80-2944-A	B80-2944-A
Socle height 35 mm	sheet steel	B80-2935-A	B80-2935-A	B80-2935-A	B80-2935-A
Socle, perforated height 35 mm	sheet steel	B80-2936-A	B80-2936-A	B80-2936-A	B80-2936-A



AUS Type 90 / 880-500 FT, Article no. B80-2901-G, with additional shelf, available as accessory

AUS Type 90 / 880-500 FT SF, Article no. B80-2903-LG,

with additional shelf.

available as accessory

Extraction

fans

please see

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#### AUS TYPE 90 / 880 AS PER DIN EN 14470-1 (TYPE 90)

Extraction

fans

please see

page 136!

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc. Store LAB Bucket



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- ◆ GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
  - RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door/s and drawer/s after temperature increase to ≤50°C and
- Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door/s / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 320 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### All models

 Base sump tray (sump capacity type FT 1 x 18 liter, type SF 1 x 18 liter, type FT SF 2 x 11 liter, type SF SF 2 x 11 liter) as per WHG - Ü-sign

according to StawaR

Perforated cover plate as 1st storing level



AUS Type 90 / 880 FT below a fume hood



AUS Type 90 / 880 FT, Article no. B80-2864-A





AUS Type 90 / 880 SF SF Article no. B80-2916-G

Model		AUS Type 90 / 880 FT	AUS Type 90 / 880 SF	AUS Type 90 / 880 FT SF	AUS Type 90 / 880 SF SF
External dimensions W x D x H (mm)		877 x 570 x 600	877 x 570 x 600	877 x 570 x 600	877 x 570 x 600
Internal dimensions W x D x H (mm)		785 x 432 x 514	785 x 432 x 514	374 / 374 x 432 x 514	374 / 374 x 432 x 514
Doors		2	-	1	-
Drawers		-	1	1	2
Weight (kg)		133	138	135	135
Outer body: RAL 7035 - light grey	Material				
	inner fittings				
Article no., door/s / drawer/s: RAL 7035 - light grey	sheet steel	B80-2864-A	B80-2865-A	B80-2914-A	B80-2916-A
Article no., door/s / drawer/s: RAL 7035 - light grey	stainless steel V2A	B80-2945-A	B80-2946-A	B80-2947-A	B80-2948-A
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	sheet steel	B80-2864-G	B80-2865-G	B80-2914-G	B80-2916-G
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2945-G	B80-2946-G	B80-2947-G	B80-2948-G
Accessories	Material	Article no.	Article no.	Article no.	Article no.
Shelf	sheet steel	B80-2816-A	-	B80-2953-A	-
Shelf	stainless steel V2A	B80-2817-A	-	B80-2954-A	-
additional pull-out shelf	sheet steel	-	B80-2949-A	B80-2951-A	B80-2951-A
additional pull-out shelf	stainless steel V2A	-	B80-2950-A	B80-2952-A	B80-2952-A
Socle height 35 mm	sheet steel	B80-2866-A	B80-2866-A	B80-2866-A	B80-2866-A
Socle, perforated height 35 mm	sheet steel	B80-2867-A	B80-2867-A	B80-2867-A	B80-2867-A



#### AUS TYPE 90 / 1100-500 AS PER DIN EN 14470-1 (TYPE 90)

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in • RAL 7035 - light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door/s and drawer/s after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door/s / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 250 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### All models

 Base sump tray (sump capacity type FT 1 x 26 liter, type SF 1 x 26 liter, type FT SF 2 x 12 liter, type SF SF 2 x 12 liter) as per WHG - Ü-sign

#### according to StawaR

Perforated cover plate as 1st storing level



Extraction please see



AUS Type 90 / 1100-500 SF, Article no. B80-2898-A, with additional pull-out shelf, available as accessory



Article no. B80-2899-A, with additional shelf, available as accessory



AUS Type 90 / 1100-500 FT SF, Article no. B80-2890-LG



AUS Type 90 / 1100-500 SF SF, Article no. B80-2900-A

Model	AUS	Type 90 / 1100-500 FT	AUS Type 90 / 1100-500 SF	AUS Type 90 / 1100-500 FT SF	AUS Type 90 / 1100-500 SF SF
External dimensions W x D x H (mm)		1100 x 500 x 600	1100 x 500 x 600	1100 x 500 x 600	1100 x 500 x 600
Internal dimensions $W \times D \times H$ (mm)		1008 x 362 x 515	1008 x 362 x 515	484 / 484 x 362 x 514	484 / 484 x 362 x 514
Doors		2	-	1	
Drawers		-	1	1	2
Weight (kg)		142	146	144	146
Outer body: RAL 7035 - light grey	Material				
	inner fittings				
Article no., door/s / drawer/s: RAL 7035 - light grey	sheet steel	B80-2899-A	B80-2898-A	B80-2890-L	B80-2900-A
Article no., door/s / drawer/s: RAL 7035 - light grey	stainless steel V2A	B80-2959-A	B80-2960-A	B80-2961-L	B80-2962-A
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	sheet steel	B80-2899-G	B80-2898-G	B80-2890-LG	B80-2900-G
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2959-G	B80-2960-G	B80-2961-LG	B80-2962-G
Accessories	Material	Article no.	Article no.	Article no.	Article no.
Shelf	sheet steel	B80-2965-A	-	B80-2933-A	-
Shelf	stainless steel V2A	B80-2966-A	-	B80-2934-A	-
additional pull-out shelf	sheet steel	-	B80-2967-A	B80-2929-A	B80-2929-A
additional pull-out shelf	stainless steel V2A	-	B80-2968-A	B80-2930-A	B80-2930-A
Socle height 35 mm	sheet steel	B80-2963-A	B80-2963-A	B80-2963-A	B80-2963-A
Socle, perforated height 35 mm	sheet steel	B80-2964-A	B80-2964-A	B80-2964-A	B80-2964-A



Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
- RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Door/s and drawer/s after temperature increase to ≤50°C and
    Inlet and outlet channels after temperature increase to 70°C (±10°C)
- Initial and outlet channels after temperature increase to 70 C (±10 C)
   DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Door/s / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 320 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### All models

 Base sump tray (sump capacity type FT 1 x 26 liter, type SF 1 x 26 liter, type FT SF 2 x 12 liter, type SF SF 2 x 12 liter) as per WHG - Ü-sign

#### according to StawaR

Perforated cover plate as 1st storing level





AUS Type 90 / 1100 FT, Article no. B80-2806-A, with socle, available as accessory



AUS Type 90 / 1100 SF, Article no. B80-2807-A, with perforated socle, available as accessory



AUS Type 90 / 1100 FT SF, Article no. B80-2808-A, with additional shelf and perforated socle, available as accessory



AUS Type 90 / 1100 SF SF, Article no. B80-2809-A, with perforated socle, available as accessory

Model	1	AUS Type 90 / 1100 FT	AUS Type 90 / 1100 SF	AUS Type 90 / 1100 FT SF	AUS Type 90 / 1100 SF SF
External dimensions W x D x H (mm)		1100 x 570 x 600	1100 x 570 x 600	1100 x 570 x 600	1100 x 570 x 600
Internal dimensions W x D x H (mm)		1008 x 432 x 514	1008 x 432 x 514	484 / 484 x 432 x 514	484 / 484 x 432 x 514
Doors		2	-	1	-
Drawers		-	1	1	2
Weight (kg)		152	155	154	155
Outer body: RAL 7035 - light grey	Material				
	inner fittings				
Article no., door/s / drawer/s: RAL 7035 - light grey	sheet steel	B80-2806-A	B80-2807-A	B80-2808-A	B80-2809-A
Article no., door/s / drawer/s: RAL 7035 - light grey	stainless steel V2A	B80-2955-A	B80-2956-A	B80-2957-A	B80-2958-A
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	sheet steel	B80-2806-G	B80-2807-G	B80-2808-G	B80-2809-G
Article no., door/s / drawer/s: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2955-G	B80-2956-G	B80-2957-G	B80-2958-G
Accessories	Material	Article no.	Article no.	Article no.	Article no.
Shelf	sheet steel	B80-2810-A	-	B80-2802-A	-
Shelf	stainless steel V2A	B80-2811-A	-	B80-2803-A	-
additional pull-out shelf	sheet steel	-	B80-2967-A	B80-2927-A	B80-2927-A
additional pull-out shelf	stainless steel V2A	-	B80-2968-A	B80-2928-A	B80-2928-A
Socle height 35 mm	sheet steel	B80-2812-A	B80-2812-A	B80-2812-A	B80-2812-A
Socle, perforated height 35 mm	sheet steel	B80-2813-A	B80-2813-A	B80-2813-A	B80-2813-A



#### AUS TYPE 90 / 1400-500 AS PER DIN EN 14470-1 (TYPE 90)

store LAB

Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
   RAL 7035 light grey
- ◆ Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Doors and drawer/s after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C ( $\pm$ 10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 250 mm

door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load

#### With inner fittings:

#### All models

- Base sump tray (sump capacity
  - type FT 1 x 18 liter, 1 x 12 liter;
  - type SF 2 x 11 liter, 1 x 12 liter;
  - type FT SF 1 x 18 liter, 1 x 12 liter;
  - type SF SF 1 x 18 liter, 1 x 12 liter)
  - as per WHG Ü-sign according

#### to StawaR

Perforated cover plate as 1st storing level



AUS Type 90 / 1400-500 SF SF, Article no. B80-2909-G AUS Type 90 / 1400-500 SF SF, Article no. B80-2909-A



Model	A	US Type 90 / 1400-500 FT	AUS Type 90 / 1400-500 SF	AUS Type 90 / 1400-500 FT SF	AUS Type 90 / 1400-500 SF SF
External dimensions W x D x H (mm)		1400 x 500 x 600	1400 x 500 x 600	1400 x 500 x 600	1400 x 500 x 600
Internal dimensions W x D x H (mm)		785 / 485 x 362 x 514	374/374/485 x 362 x 514	785 / 485 x 362 x 514	785 / 485 x 362 x 514
Doors		3	-	2	-
Drawers		-	3	1	2
Weight (kg)		190	197	192	197
Outer body: RAL 7035 - light grey	Material				
	inner fittings				
Article no., doors / drawer/s: RAL 7035 - light grey	sheet steel	B80-2906-A	B80-2907-A	B80-2908-A	B80-2909-A
Article no., doors / drawer/s: RAL 7035 - light grey	stainless steel V2A	B80-2969-A	B80-2970-A	B80-2971-A	B80-2972-A
Article no., doors / drawer/s: RAL 1007 - daffodil yellow	sheet steel	B80-2906-G	B80-2907-G	B80-2908-G	B80-2909-G
Article no., doors / drawer/s: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2969-G	B80-2970-G	B80-2971-G	B80-2972-G
Accessories	Material	Article no.	Article no.	Article no.	Article no.
Shelf left	sheet steel	B80-2937-A	-	B80-2937-A	-
Shelf right	sheet steel	B80-2933-A	-	-	-
Shelf left	stainless steel V2A	B80-2938-A	-	B80-2938-A	-
Shelf right	stainless steel V2A	B80-2934-A	-	-	-
additional pull-out shelf left (left+centre type SF)	sheet steel	-	B80-2943-A	-	B80-2941-A
additional pull-out shelf right	sheet steel	-	B80-2929-A	B80-2929-A	B80-2929-A
additional pull-out shelf left (left+centre type SF)	stainless steel V2A	-	B80-2944-A	-	B80-2942-A
additional pull-out shelf right	stainless steel V2A	-	B80-2930-A	B80-2930-A	B80-2930-A
Socle height 35 mm	sheet steel	B80-2973-A	B80-2973-A	B80-2973-A	B80-2973-A
Socle, perforated height 35 mm	sheet steel	B80-2974-A	B80-2974-A	B80-2974-A	B80-2974-A



rials testing 90 minutes



Approved for the storage of flammable liquids at the workplace as per DIN EN 14470-1 (type 90) and TRGS 510, annex 1. Allows hazardous substances to be stored where they are used: under the fume cupboard, workbench, etc.



- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-1 (type 90) with a fire resistance > 90 minutes
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in
  - RAL 7035 light grey
- Inner body made from HPL-coated sheets RAL 7035
- Automatic thermal closing mechanism if fire occurs
  - Doors and drawer/s after temperature increase to ≤50°C and
  - Inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction in the back wall
- Operation complies with TRGS 510 (approved even without exhaust air connection!)
- Ground connection in accordance with TRBS 2153 (avoidance of sources of ignition)
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- Doors / drawer/s\* with cylinder lock
- Inner width with pulled-out drawer approx. 320 mm
- door hold-open device (only FT)

\* max. load 30 kg with uniformly distributed load





AUS Type 90 / 1400 FT, Article no. B80-2917-A



AUS Type 90 / 1400 FT SF, Article no. B80-2814-A, with additional shelf and perforated socle, available as accessory



AUS Type 90 / 1400 SF SF, Article no. B80-2815-A

With inner fittings: All models

• Base sump tray (sump capacity

- type FT 1 x 18 liter, 1 x 12 liter;
- type SF 2 x 11 liter, 1 x 12 liter;
- type FT SF 1 x 18 liter, 1 x 12 liter;
- type SF SF 1 x 18 liter, 1 x 12 liter)
- as per WHG Ü-sign according

#### to StawaR

• Perforated cover plate as 1st storing level

Model	AU	IS Type 90 / 1400 FT	AUS Type 90 / 1400 SF	AUS Type 90 / 1400 FT SF	AUS Type 90 / 1400 SF SF
External dimensions W x D x H (mm)		1400 x 570 x 600	1400 x 570 x 600	1400 x 570 x 600	1400 x 570 x 600
Internal dimensions W x D x H (mm)	78	85 / 485 x 432 x 514	374/374/485 x 432 x 514	785 / 485 x 432 x 514	785 / 485 x 432 x 514
Doors		3	-	2	-
Drawers		-	3	1	2
Weight (kg)		201	208	202	208
Outer body: RAL 7035 - light grey	Material				
	inner fittings				
Article no., doors / drawer/s: RAL 7035 - light grey	sheet steel	B80-2917-A	B80-2918-A	B80-2814-A	B80-2815-A
Article no., doors / drawer/s: RAL 7035 - light grey	stainless steel V2A	B80-2975-A	B80-2976-A	B80-2977-A	B80-2978-A
Article no., doors / drawer/s: RAL 1007 - daffodil yellow	sheet steel	B80-2917-G	B80-2918-G	B80-2814-G	B80-2815-G
Article no., doors / drawer/s: RAL 1007 - daffodil yellow	stainless steel V2A	B80-2975-G	B80-2976-G	B80-2977-G	B80-2978-G
Accessories	Material	Article no.	Article no.	Article no.	Article no.
Shelf left	sheet steel	B80-2816-A	-	B80-2816-A	-
Shelf right	sheet steel	B80-2802-A	-	-	-
Shelf left	stainless steel V2A	B80-2817-A	-	B80-2817-A	-
Shelf right	stainless steel V2A	B80-2803-A	-	-	-
additional pull-out shelf left (left+centre type SF)	sheet steel	-	B80-2951-A	-	B80-2949-A
additional pull-out shelf right	sheet steel	-	B80-2927-A	B80-2927-A	B80-2927-A
additional pull-out shelf left (left+centre type SF)	stainless steel V2A	-	B80-2952-A	-	B80-2950-A
additional pull-out shelf right	stainless steel V2A	-	B80-2928-A	B80-2928-A	B80-2928-A
Socle height 35 mm	sheet steel	B80-2818-A	B80-2818-A	B80-2818-A	B80-2818-A
Socle, perforated height 35 mm	sheet steel	B80-2819-A	B80-2819-A	B80-2819-A	B80-2819-A

#### MODELS 1 - 10

Our safety cabinets for the storage of hazardous substances are provided with a DN 80 exhaust air connection. The forced ventilation can be carried out by one of our standard extraction fans or by a suitable in-house air extraction system. The exhaust air is to be discharged from the building into a hazard-free zone.

The operation of safety cabinets for the storage of flammable liquids as per DIN EN 14470-1 is governed by TRGS 510. When operating the cabinets without technical forced ventilation, additional replacement measures have to be taken to ensure comparable explosion protection. The herfore required risk assessment we suggest to undertake as per BGR 104 (EX-RL) example collection 2.2.8.

For this reason, and also to avoid the presence of hazardous vapors in the atmosphere near the cabinet, we always recommend that safety cabinets are operated with an extraction fan (min. air exchange rate 10 times per hour) for proper operation in accordance with TRGS 510, annex 1! If an extraction fan is to be used in an EX-endangered zone then it is essential that an EX-proof version is used!

#### <u>Models 1 + 3 + 9</u>

#### Extraction from individual safety cabinets

For mounting directly on the storeLAB<sup>\*</sup> safety cabinet - complicated connections from the extraction fan to the safety cabinet are no longer necessary!!

- Not suitable for fume hood underbenches
- With mounting plate for easy mounting on cabinet roof suction side of fan is connected

If the safety cabinet is used together with an extraction fan then it is no longer necessary to set up and maintain an EX-zone around the safety cabinet!

#### <u>Models 5 + 7 + 10</u>

#### Extraction from up to 2 safety cabinets

Extraction fan with mounting base, for separate installation beside (e.g. on wall of room) or on the safety cabinet

- Suitable for all storeLAB<sup>\*</sup> safety cabinets
- With mounting plate for easy mounting on cabinet roof

#### <u> Models 4 + 8</u>

#### **Plug-in versions**

Easy extraction fan connection (suction side) with DN 80 flexible aluminum tubing, with earthed plug and 2 m connection cable.

- Not suitable for fume hood underbenches
- For mounting on safety cabinet

Model 8 with exhaust air monitoring:

- Extraction fan operation checked by monitoring the air flow
- Acoustic message if extraction fan stops working or safety cabinet ventilation slots become blocked



Installation example: Models 1 + 3 + 9



Installation example: Models 5 + 7 + 10



Installation example: Model 8

Description	Model 1	Model 3	Model 9	Model 5	Model 7	Model 10	Model 4	Model 8
EX-proof	NO	YES	YES	NO	YES	YES	NO	NO
Electricity supply	230 V	400 V	230 V	230 V	400 V	230 V	230 V	230 V
Weight (kg)	6,0	6,0	6,0	6,0	6,0	6,0	7,5	7,5
Article no.	B80-2839-A	B80-2841-A	B80-2847-A	B80-2844-A	B80-2846-A	B80-2848-A	B80-2842-A	B80-2843-A

All extraction fans comply with EG Directive 94/9/EG (ATEX)

D E2 E1 W store LAB

#### HAZARDOUS SUBSTANCES FILTER ATTACHMENT GFA BASIC

The LACONT hazardous substances filter attachment GFA Basic works with forced air circulation and is used for the technical ventilation of storeLAB<sup>\*</sup> safety cabinets type 30 / type 90 as per DIN EN 14470-1 for the storage of flammable liquids.

Because of its quiet operation the LACONT hazardous substances filter attachment GFA Basic is ideal for direct use at the workplace.

#### Functioning, display and operation:

The LACONT hazardous substances filter attachment GFA Basic reacts to coarse particulate contaminants (dust, etc.) as well as to strong contamination of the exhaust air by hydrocarbon vapors and gases. A saturated filter is indicated by warning LEDs. Hydrocarbon vapors are removed from the exhaust air from the cabinet by passing it through the built-in active charcoal filter so that the air can be discharged directly into the room atmosphere. The special feature of the filter is its tandem structure. If the main filter is saturated, the second integrated filter ensures additional security over a period up to 14 days.

In order to ensure hazard-free working conditions the LACONT hazardous substances filter attachment GFA Basic should be serviced and its functions checked by an expert at least once per year. The tandem active charcoal filter should be replaced during this check.

# store LAB



lechnical data:	
Housing:	Powder-coated sheet steel, RAL 7035 - light grey
External dimensions (W x D x H):	310 mm x 510 mm x 210 mm
Motor performance:	0,03 kW
Nominal voltage:	230 V
Frequency:	50 Hz
Current consumption:	0,2 A
Noise level:	< 42 dB (A)
Net weight (without filter):	10 kg
Weight of active charcoal filter:	3 kg
Volume flow (at cabinet):	25 m³/h

#### **Benefits:**

\_ . . . . . .

If a LACONT hazardous substances filter attachment GFA Basic is used then it is no longer necessary to maintain an explosion-endangered zone around the safety cabinet (see TRGS 510, annex 1), as proved by a test report issued by an authorized testing, monitoring and certification office (test laboratory accredited by the German Accreditation Council DAR)

- Exhaust ducts venting in the open air are no longer necessary, therefore no cost-intensive installation work is required
- No room atmosphere pollution due to virtually 100% filtering of all solvent vapours employee health protection!
- Low service and maintenance costs



Description	Article no.
Hazardous substances filter attachment GFA Basic	B80-2880-A
Attachment adapter for storeLAB <sup>®</sup> type 30 cabinets	B80-2994-A
Attachment adapter for storeLAB <sup>®</sup> type 90 cabinets	B80-2883-A
Attachment adapter for storeLAB <sup>°</sup> CHS 950 / SiBox	B80-2885-A
Attachment adapter for storeLAB <sup>°</sup> AUS type 30 / 90	B80-2993-A
Attachment adapter for storeLAB <sup>°</sup> SiS-FAS type 90 / 900	B80-2884-A
Attachment adapter for storeLAB <sup>°</sup> SiS-FAS type 90 / 1550	included
Replacement filter	B80-2882-A



Further attachment adapters for older safety cabinets available on request!



#### AIRBAG - CABINET TYPE 90 / 900 AIR AS PER DIN EN 14470-1 (TYPE 90)

The storage of explosive substances and devices containing explosive substances, such as airbag and seat belt tensioning units, is not permitted in the direct vicinity of the workplace. An exception is made for storage devices that have been specially designed for this purpose.

#### Approved for storage of airbags and seat belt tensioning units of class PT1 and PT2 as well as storage group 1.4

- Whole construction tested and approved by BAM Berlin by explosion test
- Fire resistance by test certificate of >90 minutes (according to DIN EN 14470-1 - type 90)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel in RAL 7035 light grey
- Doors in RAL 1007 daffodil yellow
- Doors with cylinder lock special safety lock system

1.4

1.4

1

- Stainless steel base plate Niro Rhombus
- Inner body made from HPL-coated sheets RAL 7035 light grey
- Markings according to DIN EN 14470-1 / TRGS 510 / ISO 3864 / ASR A1.3
- door hold-open device

5

Approved by BAM Berlin



SiS Type 90 / 900 Air, Article no. B80-2879-A

#### With inner fittings:

- Four storing levels height-adjustable at intervals of 25 mm
- Corrosion resistance by galvanized shelf system
- Complete electrostatic interconnection of all components and inner fittings by built-in grounding cable harness - grounding connection on cabinet roof

-	
Model	SiS Type 90 / 900 Air
External dimensions W x D x H (mm)	900 x 900 x 1935
Internal dimensions W x D x H (mm)	797 x 735 x 1740
Doors	2
Weight (kg)	530
Article no., outer body: RAL 7035 - light grey,	
doors: RAL 1007 - daffodil yellow	B80-2879-A
Accessories	Article no.
Socle, tested acc. to type 90 cabinets W x D x H (mm) = 900 x 900 x 113	B80-2713-A

SiS Type 90 / 900 Air, Article no. B80-2879-A

> Fulfils the requirements of the second directive to the Explosive Substances Law § 2 Annex No. 4 for the storage of small amounts as per Test Report BAM Berlin !

# STORAGE AND TRANSPORT OF LITHIUM-ION BATTERIES

NEW from page 186



Collecting, shipping, transportation and storage of lithium-ion batteries ...?



... we have the right solutions !

#### **PRACTICAL INFORMATION 7**

However, in Germany TRGS 510 applies as the basis for the storage of pressurized gas cylinders. The following principles must be observed (further details and requirements can be found in TRGS 510):

#### STORAGE (GefStoffV § 2, para. 6):

Storage is the retention of substances intended for later use as well as for the transport to others. Provisioning for transport is included as long as the transport does not take place within 24 hours after provisioning or within the following day.

#### STORES INDOORS (TRGS 510 No. 10.3, para. 1):

Rooms for storing compressed gas cylinders must be separated from adjacent rooms by fire-retardant components at least. Fire-resistant components are required if there is a risk of fire and explosion in adjacent rooms which are not intended for the storage of compressed gas cylinders.



The fire behavior of components as per DIN 4102 is to be considered as **FIRE-RETARDANT** in the sense of TRGS if duration time is 30 minutes at least (fire-resistance class F30).

The fire behavior of components as per DIN 4102 is to be considered as **FIRE-RESISTANT** in the sense of TRGS if duration time is 90 minutes at least (fire-resistance class F90).

#### Safety cabinets for compressed gas cylinders according to DIN EN 14470-2:

Compressed-gas cylinders may only be stored in workrooms if, e.g., they are stored in safety cabinets acc. to DIN EN 14470-2.

#### The classification of the fire resistance period has been defined

in 4 types:

G 15	=	≥ 15 minutes
G 30	=	≥ 30 minutes
G 60	=	≥ 60 minutes
G 90	=	≥ 90 minutes

The DIN EN 14470-2 describes the design as well as test criteria for safety cabinets intended for the storage of pressurized gas cylinders at room temperature.

#### TRGS 526 / DGUV information 213-850 - Safe work in laboratories:

**5.2.11.1** For reasons of fire prevention, compressed gas cylinders always have be installed safely outside laboratories. The gases are to be fed to the work rooms via contantly technically tight, permanently installed pipelines. If this is not possible, the accommodation in safety cabinets acc. to DIN EN 14470-2 could be expedient.

All types of gases bear a risk in case of fire! The fire resistance period of the safety cabinet has to be determined by means of a hazard assessment based on the existing fire loads and the hazard potential of the gases to be stored.

#### SIZ G30 / 600 - 1400 (GAS CELLS) AS PER DIN EN 14470-2 (G 30)

#### Approved for storage of pressurized gas cylinders at the workplace as per DIN EN 14470-2 (G 30)

- Whole construction tested and approved by an authorized materials testing institute as per DIN EN 14470-2
- GS-approved safety (GS-sign)
- Insulation according to DIN 4102
- Outer body made from powder-coated sheet steel, RAL 7035 - light grey, door/s either in RAL 7035 - light grey or RAL 1007 - daffodil yellow
- Inner body made from HPL-coated sheets RAL 7035
- Stainless steel base plate Niro Rhombus
- Automatic thermal closing mechanism if fire occurs: inlet and outlet channels after temperature increase to 70°C (±10°C)
- DN 80 ventilation connection for exhaust air extraction
- Leveling feets for installing cabinet horizontally
- Door/s with cylinder lock

#### • With inner fittings:

- 1 x stainless steel floor plate
- 1 x holder for 50 liter gas cylinder per cylinder place
- 2 x horizontal C-rails for attaching gas fittings



Model



External dimensions W x D x H (mm) 595 x 598 x 2015 900 x 598 x 2015 1190 x 598 x 2015 1400 x 598 x 2015 Internal dimensions W x D x H (mm) 492 x 430 x 1785 797 x 430 x 1785 1087 x 430 x 1785 1297 x 430 x 1785 Capacity up to two (2) up to three (3) up to four (4) up to four (4) 50 l gas cylinders 50 l gas cylinders 50 l gas cylinders 50 l gas cylinders Door/s 1 (DIN right) 2 2 2 Weight (kg) 295 375 475 610 Outer body: RAL 7035 - light grey Article no., door/s: RAL 7035 - light grey B80-5015-C B80-5016-C B80-5017-C B80-5018-C Article no., door/s: RAL 1007 - daffodil yellow B80-5015-G B80-5016-G B80-5017-G B80-5018-G Accessories Shelf\* B80-5010-C B80-5011-C B80-5012-C B80-5013-C suitable for all models B80-5014-C Side-mounted shelf B80-2833-A Drive-in ramp, stainless steel V2A suitable for all models

SiZ G30/600

\*) Shelf across whole width of safety cabinet, powder-coated sheet steel in RAL 7035 - light grey

MA Dresder Gesprifto Sicherheit



SiZ G30/1200, Article no. B80-5017-C, with side-mounted shelf, available as accessory



SiZ G30/900

TRG cells can be found on page 192/193!

SiZ G30/1200

SiZ G30/1400

#### **PRACTICAL INFORMATION 8**

The storage of flammable liquids is regulated in the GefStoffV and BetrSichV. Regarding the storage of hazardous substances in mobile container the requirements have been included in the TRGS 510. The TRGS 510 reflects requirements in the numbers 4,5,6 and 12 as well as the annex 1 which comply with the state of the art in respect of compliance with an implementation of these requirements.

The TRGS 509 deals with the storage of flammable liquids in stationary containers and in particular with mobile container filling and emptying points. The requirements of this guideline are to be considered, if in a warehouse containers are opened for withdrawal and filling. Here then takes place an "active storage", in contrast to a "passive storage" in which the containers are not opened. In practice, this has a considerable influence on the measures to be taken for explosion protection and zoning.

According to CLP, the inflammatory fluids are classified in

Designation	Category	Symbol	Signal word	H-phrase	Criteria
extremely flammable	Cat. 1	$\mathbf{\wedge}$	Danger	H224	FP < 23 ℃ SB ≤ 35 ℃
easy flammable	Cat. 2		Danger	H225	FP < 23 ℃ SB ≥ 35 ℃
flammable	Cat. 3		Attention	H226	FP ≥ 23 °C up to ≤ 60 °C

FP = Flash point SB = Boiling point

In addition to the TRGS 510, the GefStoffV § 11 and Annex 1 No. 1, in particular, stipulates special regulations for fire and explosion hazards which must be observed.

#### Quantity limits:

vo	What	Quantity limit	Related	
BetrSichV	Permission § 18	10.000 l	extremely flammable easy flammable	
BlmSchG i.V.m. 4. BlmSchV	§ 19 Authorization	≥ 5.000 t up to <10.000 t	FP < 21 ℃ SB > 20 ℃	
	§ 10 Authorization	≥ 10.000 t	FP ≤ 100 °C	
BlmSchG i.V.m. 12. BlmSchV		≥ 10.000 kg	extremely flammable	
	§ 23a also display possible	≥ 5.000.000 kg	easy flammable flammable	
	§ 23b Authorization	≥ 50.000 kg	extremely flammable	
		≥ 50.000.000 kg	easy flammable flammable	

FP = Flash point SB = Boiling point

#### Temporal change in the classification of flammable liquids

VbF 31.12.2002		BetrSichV and GefStoffV from 01.01.2003				GHS from 20.01.2009 with periods of transition			
Designation	Criteria	Designation	Hazard symbol	R-phrase	Criteria	Designation	Hazard symbol	H-phrase	Criteria
AI	ED + 21 %C	highly flammable	F+	R12	FP < 0 °C SB ≤ 35 °C	extremely flammable	Cat. 1, Flame Danger	H224	FP < 23 ℃ SB ≤ 35 ℃
	FP < 21 ℃	easy flammable	F	R11	FP < 21 ℃	easy flammable	Cat. 2, Flame Danger	H225	FP < 23℃ SB > 35℃
All	FP ≥ 21 °C up to ≤ 55 °C	flammable	without	R10	FP ≥ 21°C up to ≤ 55 °C	flammable	Cat. 3, Flame Attention	H226	FP ≥ 23 °C up to ≤ 60 °C
AIII	FP ≥ 55 °C up to ≤ 100 °C	-	-	-	-	-	-	-	-
B at 15 °C Water	FP < 21 °C, at 15 °C in	highly flammable	F+	R12	FP < 0 °C SB ≤ 35 °C	extremely flammable	Cat. 1, Flame Danger	H224	FP < 23 ℃ SB ≤ 35 ℃
	Water soluble	easy flammable	F	R11	FP < 21 ℃	easy flammable	Cat. 2, Flame Danger	H225	FP < 23℃ SB > 35℃
-	-	flammable	without	R10	FP ≥ 21 °C up to ≤ 55 °C	flammable	Cat. 3, Flame Attention	H226	FP ≥ 23 °C up to ≤ 60 °C

The list is purely informative and gives a simplified overview without claiming to be complete. It is not intended to classify substances or mixtures. This must be done according to the valid regulations exclusively.

FP = Flash point SB = Boiling point

#### TABLE OF CONTENTS - OUTDOOR STORAGE SYSTEMS

### 4. Outdoor storage systems ...



Our outdoor storage systems are available in our standard color RAL 5015 - sky blue (if not specified separately)





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Safety storage depots page 146-147



Storage cabinet for KTC page 148



Safety storehouses page 149-157



Water protection compartment containers page 158-165



Thermo-Containers page 166-167



Heated chambers page 168-169



Special containers page 170-171



Projects / plant construction page 172-176

#### STATIONS FOR HAZARDOUS SUBSTANCES

Small and medium-sized companies normally have a large number of different-sized containers with contents that represent an environmental hazard. If these are then to be stored at a particular location, with some of them vertical and some horizontal, this frequently causes problems. In such cases our stations for hazardous substances supply the ideal solution based on legal requirements.



- Universal use due to variable inner fittings
- Lockable pneumatically sprung cover
- Storage of containers up to 220 liters capacity



with shelving as special equipment





2GSKS / Gitt, with shelving as special equipment



with shelving as special equipment





Two additional grids as storage level with shelf supports and crossbeams for 2 drum types						
Grid dimensions W x D (mm)	2 x 1260 x 500 (whole width)	2 x 650 x 500 (half width)				
Compartment height (top) for 60 liter drums (mm)	1 x 465	1 x 465				
(bottom) for small containers (mm)	2 x 205	2 x 205				
Storage possibilities on these levels						
Article no., small containers only	P21-2540-B	P21-2541-B				
Article no., 1 x 60 liter drum horizontal and small containers	P21-2542-B	P21-2543-B				
Article no., 2 x 60 liter drums horizontal and small containers	P21-2544-B	-				
Article no., 3 x 60 liter drums horizontal and small containers	P21-2545-B	-				

#### Additional storage levels for 4 drum models available on request!



#### SAFETY STORAGE DEPOTS

#### Approved for the storage of water-endangering substances

These compact storage depots have been specially developed for drum and KTC/IBC storage on the basis of our practically-proven safety storehouses. Due to their generous dimensions it is possible to store 200 liter drums directly above the base sump tray or also on euro- or chemical pallets.

There is also sufficient space available for storing large containers (KTC/IBC).





SLH 1,5 x 1,5 KTC, Article no. H61-2122-B





#### SLH 1 x 1, Article no. H61-2120-B

#### Special container construction:

- Made from specially profiled galvanized sheet steel
- Reinforced roof and base profile frames
- Circumferential splash protection made from sheet steel, except in door area
- ◆ 1-wing door, W x H (mm) = 1300 x 1580, lockable with safety lock
- Built-in weather-protected ventilation slots in door and sidewalls

#### Base sump tray:

- Made from 3 mm <u>fire galvanized</u> sheet steel, as per WHG Ü-sign according to StawaR
- Galvanized grid as support level
- ◆ Ground clearance 100 mm, for model SLH 1,5 x 1,5 KTC 60 mm



SLH 1,5 x 1,5 KTC, thermally insulated version, price on request!

Model	SLH 1 x 1	SLH 1,5 x 1,5	SLH 1,5 x 1,5 KTC
External dimensions W x D x H (mm)	1700 x 1300 x 2015	1700 x 1700 x 2015	1700 x 1700 x 2250
Internal dimensions W x D x H (mm)	1570 x 1170 x 1650	1570 x 1570 x 1650	1570 x 1570 x 1650
Sump capacity (I)	220	220	1000
Capacity	2 x 200 liter drum	4 x 200 liter drum	1 x KTC
Weight (kg)	310	390	430
Article no., galvanized	H61-2120-B	H61-2121-B	H61-2122-B
Article no., galvanized, exterior painted	H61-6120-B	H61-6121-B	H61-6122-B



#### SAFETY STORAGE DEPOTS WITH NATURAL VENTILATION

#### Approved for the passive storage of flammable liquids

#### **Special container construction:**

- Made from specially profiled galvanized sheet steel
- Reinforced roof and base profile frames
- Circumferential splash protection made from sheet steel, except in door area
- 1-wing door, W x H (mm) = 1300 x 1580, lockable with safety lock
- Built-in weather-protected ventilation slots in door and sidewalls

#### Base sump tray:

- Made from 3 mm <u>fire galvanized</u> sheet steel, as per WHG - Ü-sign according to StawaR
- Galvanized grid as support level
- Ground clearance 100 mm, for model SLH-NB 1,5 x 1,5 KTC 60 mm

#### Natural ventilation:

- The legally required 0.4-fold minimum air exchance rate is achieved by the continuous ventilation slots directly above the base sump tray and the ventilation slots in the door and side walls.
- With ground connection for the avoidance of hazardous electrostatic charges (for Ex-zone 2).





SLH-NB 1 x 1, Article no. H61-1110-A



SLH-NB 1 x 1, Article no. H61-1110-A



SLH-NB 1 x 1, Article no. H61-1110-A

Rate of air exchange has been tested and approved in accordance with the latest requirements of DIBt Berlin!

Model	SLH-NB 1 x 1	SLH-NB 1,5 x 1,5	SLH-NB 1,5 x 1,5 KTC
External dimensions W x D x H (mm)	1700 x 1300 x 2160	1700 x 1700 x 2160	1700 x 1700 x 2405
Internal dimensions W x D x H (mm)	1570 x 1170 x 1790	1570 x 1570 x 1790	1570 x 1570 x 1790
Sump capacity (l)	220	220	1000
Capacity	2 x 200 liter drum	4 x 200 liter drum	1 x KTC
Weight (kg)	330	420	460
Article no., galvanized	H61-1110-A	H61-1111-A	H61-1112-A
Article no., galvanized, exterior painted	H61-2110-A	H61-2111-A	H61-2112-A



#### SUMP TRAY MADE FROM STEEL WITH SUPERSTRUCTURE



#### **KTC-STORAGE CABINET**

#### For the storage of water-endangering liquids

- Lockable weather protection superstructure therefore, suitable for outdoor storage
- Sump pallet made from 3 mm sheet steel as per WHG Ü-sign according to StawaR
- Corrosion protection by priming and painting of the sump pallet
- Weather protection superstructure made from glavanized sheet steel
- Sump capacity: 1.000 liters
- Max. load: 1.500 kg/m<sup>2</sup>
- 100 mm ground clearance for transport with forklift truck
- Ventilation slots in the sidewalls
- ♦ Incl. filling stand
- Compartment for documents in the doors as standard



### Ventilation slots in the side walls

Model	WSP-1SKKS-D/KTC
External dimensions W x D x H (mm)	1320 x 1370 x 2380
Internal dimensions W x D x H (mm)	1285 x 1285
Compartment height (mm)	1580
Weight (kg)	450
Article no., galvanized	P21-2485-A



WSP-1SKKS-D/KTC, Article no. P21-2485-A

#### EXHAUST FAN SET FOR KTC-STORAGE CABINET

#### For the storage of flammable liquids according to TRGS 510

#### available as accessory:

- For the correct suction above the base sump tray
- Suitable for active and passive storage of flammable liquids
- Exhaust fan set wired up to switch box
- Service provided by the customer: Power supply 230 V



Switch box, incl. wiring





Exhaust fan set, Article no. P21-2486-A



#### SAFETY STOREHOUSES FOR KTC

#### **Special container superstructure**

- Made from especially profiled and galvanized sheet steel
- Reinforced roof and frame profiles
- Circumferential splash protection made from sheet steel, except door area
- Weather-protected venting slots in the door and opposite door
- SLH 2 x 2/KTC and SLH-NB 2 x 2/KTC lifting attachments as standard
- Mounted delivery

#### Sump tray with grid

- Made from 3 mm sheet steel, <u>fire-galvanized</u>, as per
   WHG Ü-sign according to StawaR
- Max. load 1500 kg/m<sup>2</sup>, higher load on request
- Ground clearance 100 mm

#### 2-winged galvanized steel door

- With venting slots
- Safety lock
- Door width:
  - SLH 2 x 2/KTC and SLH-NB 2 x 2/KTC: 1950 mm
  - SLH 3 x 2/KTC and SLH-NB 3 x 2/KTC: 2650 mm
  - increased door width simlifies the loading of 2 KTC/IBC

Approval-No.: Z-38.5-171 General Technical Approval Dibt Berlin

> Thermal insultated version for frostfree storage on request!

#### Approved for the storage of:

- Type SLH 2 x 2/KTC and SLH 3 x 2/KTC
  - Approved for the storage of water-endangering media
- Type SLH-NB 2 x 2/KTC and SLH-NB 3 x 2/KTC
  - Approved for the passive storage of flammable media
    The legally required air exchange of at least 0.4 fold is achieved by venting slots situated directly above the sump tray and in the upper part of back wall and door.
  - Incl. ground connection in order to avoid dangerous electrostatic charge



Accessories please see pages 156/157!



Approved	for water-endangering liquids		for flammable li	e líquids (passive storage)	
Model	SLH 2 x 2/KTC	SLH 3 x 2/KTC	SLH-NB 2 x 2/KTC	SLH-NB 3 x 2/KTC	
External dimensions W x D x H (mm)	2075 x 2075 x 2480	3075 x 2075 x 2385	2075 x 2075 x 2665	3075 x 2075 x 2565	
Internal dimensions W x D x H (mm)	1980 x 1980 x 1970	2980 x 1980 x 1970	1980 x 1980 x 2150	2980 x 1980 x 2150	
Door width (mm)	1950	2650	1950	2650	
Sump capacity (l)	1000	1000	1000	1000	
Capacity	1 KTC/IBC	2 KTC/IBC	1 KTC/IBC	2 KTC/IBC	
Article no., galvanized	H61-2116-B	H61-2143-B	H63-1116-A	H63-1112-A	
Article no., galvanized and exterior painted	H61-6116-B	H61-6143-B	H63-2116-A	H63-2112-A	





#### SAFETY STOREHOUSES

Our standard - double door and lifting attachments for cranes!







The safety storehouse is a proved, favorably priced mobile outdoor storage facility for hazardous substances.

It can be transported unloaded at any time using a fork-lift truck or crane. Thanks to its modular design there are 13 types for selection. This allows the system to be optimally adapted to suit the user's actual requirements.

If equipped with shelving the safety storehouse is ideally suited for use as a walk-in store for small containers.

#### Base sump tray with grid support

- Made from 3 mm fire galvanized sheet steel, as per WHG - Ü-sign according to StawaR
- Max. load 1000 kg/m<sup>2</sup>, higher loads on request
- Ground clearance 100 mm ٠
- Sump capacity 10 % of possible total storage capacity





SLH 1 x 2, galvanized, Article no. H61-2101-B, with optional shelving

#### **Special container construction**

- Made from specially profiled galvanized sheet steel
- Reinforced roof and base profile frames
- Circumferential splash protection made from sheet steel, except in door area
- Galvanized steel double door with ventilation slots, 1750 mm wide, lockable with safety lock
- Built-in weather-protected ventilation slots in door and opposite rear panel
- Lifting attachments for cranes as standard



Model	SLH 1 x 2	SLH 2 x 2	SLH 3 x 2	SLH 4 x 2	SLH 5 x 2	SLH 6 x 2	SLH 4 x 3
External dimensions W x D x H (mm)	2075 x 1075 x 2385	2075 x 2075 x 2385	3075 x 2075 x 2385	4075 x 2075 x 2385	5075 x 2075 x 2385	6075 x 2075 x 2385	4075 x 2875 x 2400
Internal dimensions W x D x H (mm)	1980 x 980 x 1970	1980 x 1980 x 1970	2980 x 1980 x 1970	3980 x 1980 x 1970	4980 x 1980 x 1970	5980 x 1980 x 1970	3980 x 2780 x 1970
Sump capacity (l)	300	660	1000	1000	1300	1500	2 x 1000
Delivery	mounted						
Article no., galvanized	H61-2101-B	H61-2102-B	H61-2103-B	H61-2104-B	H61-2105-B	H61-2106-B	H61-2108-C
Article no., galvanized							
and exterior painted	H61-6101-B	H61-6102-B	H61-6103-B	H61-6104-B	H61-6105-B	H61-6106-B	H61-6108-C





Internal dimensions W x D x H (mm)	5980 x 2/80 x 19/0	4980 x 4210 x 1900	4980 x 6440 x 1900	4980 x 8670 x 1900	3980 x 6440 x 1900	3980 x 8670 x 1900
Sump capacity (I)	2 x 1400	2 x 1300	3 x 1300	4 x 1300	3 x 1000	4 x 1000
Delivery	mounted	2 components premounted,	3 components premounted,	4 components premounted,	3 components premounted,	4 components premounted,
		final installation provided				
		by the customer				
Article no., galvanized	H61-2110-C	H61-2150-A	H61-2151-A	H61-2152-A	H61-2160-A	H61-2161-A
Article no., galvanized and exterior painted	H61-6110-C	H61-6150-A	H61-6151-A	H61-6152-A	H61-6160-A	H61-6161-A



#### SAFETY STOREHOUSES WITH NATURAL VENTILATION

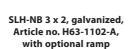
- For the passive storage of flammable liquids
- The legally required 0.4-fold minimum air exchance rate is achieved by continuous ventilation slots directly above the base sump tray and ventilation slots in the upper area of back wall and door
- Ground connection to avoid dangerous electrostatic charges
- Mounted delivery (SLH-NB 5 x 4, 5 x 6, 5 x 8, 4 x 6 and 4 x 8 premounted).

Our standard - double door and lifting attachments for cranes!



Rate of air exchange has been tested and approved in accordance with the latest requirements of DIBt Berlin!

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Model SLH-NB 1 x 2 SLH-NB 2 x 2 SLH-NB 3 x 2 SLH-NB 4 x 2 SLH-NB 5 x 2 SLH-NB 6 x 2 SLH-NB 4 x 3 External dimensions W x D x H (mm) 2075 x 1075 x 2570 2075 x 2075 x 2570 3075 x 2075 x 2570 4075 x 2075 x 2570 5075 x 2075 x 2570 6075 x 2075 x 2570 4075 x 2875 x 2585 Internal dimensions W x D x H (mm) 1980 x 980 x 2150 1980 x 1980 x 2150 2980 x 1980 x 2150 3980 x 1980 x 2150 4980 x 1980 x 2150 5980 x 1980 x 2150 3980 x 2780 x 2150 Sump capacity (I) 300 660 2 x 1000 1000 1000 1300 1500 Delivery mounted mounted mounted mounted mounted mounted mounted Article no., galvanized H63-1100-A H63-1101-A H63-1102-A H63-1103-A H63-1104-A H63-1105-A H63-1107-C Article no., galvanized H63-2100-A H63-2101-A H63-2102-A H63-2103-A H63-2104-A H63-2105-A H63-2107-C and exterior painted



#### SAFETY STOREHOUSES WITH NATURAL VENTILATION

Our standard - double door and lifting attachments for cranes!



Rate of air exchange has been tested and approved in accordance with the latest requirements of DIBt Berlin (please see practical information on page 159, Ventilation of hazardous substances storages)!

> Double door in long side as standard, doors in short side on request! For sizes 5 x 6, 5 x 8, 4 x 6 and 4 x 8 double door in short side!



SLH-NB 5 x 2, galvanized, Article no. H63-1104-A

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SLH-NB 2 x 2, galvanized, Article no. H63-1101-A

> SLH-NB 3 x 2, galvanized, Article no. H63-1102-A, with optional ramp

Model	SLH-NB 6 x 3	SLH-NB 5 x 4	SLH-NB 5 x 6	SLH-NB 5 x 8	SLH-NB 4 x 6	SLH-NB 4 x 8
External dimensions W x D x H (mm)	6075 x 2875 x 2570	5075 x 4330 x 2790	5075 x 6560 x 2790	5075 x 8790 x 2790	4075 x 6560 x 2790	4075 x 8790 x 2790
Internal dimensions W x D x H (mm)	5980 x 2780 x 2150	4980 x 4210 x 2080	4980 x 6440 x 2080	4980 x 8670 x 2080	3980 x 6440 x 2080	3980 x 8670 x 2080
Sump capacity (I)	2 x 1400	2 x 1300	3 x 1300	4 x 1300	3 x 1000	4 x 1000
Delivery	mounted	2 components premounted,	3 components premounted,	4 components premounted,	3 components premounted,	4 components premounted,
		final installation provided				
		by the customer				
Article no., galvanized	H63-1109-C	H63-1150-A	H63-1151-A	H63-1152-A	H63-1160-A	H63-1161-A
Article no., galvanized and exterior painted	H63-2109-C	H63-2150-A	H63-2151-A	H63-2152-A	H63-2160-A	H63-2161-A



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#### THERMO SAFETY STOREHOUSES

Our standard - double door and

lifting attachments for cranes!

#### For storing hazardous substances frost-free or at constant temperature

- Mounted delivery (SLT 5 x 4, 5 x 6, 5 x 8, 4 x 6 and 4 x 8 premounted).
- Safety storehouse insulation: insides of all walls, roof and doors fitted with 60 mm thick, non-flammable insulation material
- Insulation of base sump tray optional
- Ground clearance 50 mm by insulated base sump tray
- Heating according to size and required interior temperature
- Circumferential splash protection made from sheet steel, except in door area
- With ground connection to avoid dangerous electrostatic charges
- For the storage of flammable liquids a forced ventilation system is required.

Double door in long side as standard, doors in short side on request!



SLT 3 x 2, galvanized, with special fittings



SLT 6 x 3, galvanized

Model	SLT 1 x 2	SLT 2 x 2	SLT 3 x 2	SLT 4 x 2	SLT 5 x 2	SLT 6 x 2	SLT 4 x 3
External dimensions W x D x H (mm)	2075 x 1075 x 2385	2075 x 2075 x 2385	3075 x 2075 x 2385	4075 x 2075 x 2385	5075 x 2075 x 2385	6075 x 2075 x 2385	4075 x 2875 x 2400
Internal dimensions W x D x H (mm)	1840 x 910 x 1900	1840 x 1840 x 1900	2840 x 1840 x 1900	3840 x 1840 x 1900	4840 x 1840 x 1900	5840 x 1840 x 1900	3840 x 2640 x 1900
Sump capacity (l)	300	660	1000	1000	1300	1500	2 x 1000
Delivery	mounted						
Article no., galvanized	H63-1000-A	H63-1001-A	H63-1002-A	H63-1003-A	H63-1004-A	H63-1005-A	H63-1007-C
Article no., galvanized							
and exterior painted	H63-2000-A	H63-2001-A	H63-2002-A	H63-2003-A	H63-2004-A	H63-2005-A	H63-2007-C
Accessories for model	SLT 1 x 2	SLT 2 x 2	SLT 3 x 2	SLT 4 x 2	SLT 5 x 2	SLT 6 x 2	SLT 4 x 3
Base sump tray insulation	H63-1020-A	H63-1021-A	H63-1022-A	H63-1023-A	H63-1024-A	H63-1025-A	H63-1027-A







#### SLT 5 x 6, galvanized and outside special painted

Model	SLT 6 x 3	SLT 5 x 4	SLT 5 x 6	SLT 5 x 8	SLT 4 x 6	SLT 4 x 8
External dimensions W x D x H (mm)	6075 x 2875 x 2385	5075 x 4330 x 2605	5075 x 6560 x 2605	5075 x 8790 x 2605	4075 x 6560 x 2605	4075 x 8790 x 2605
Internal dimensions W x D x H (mm)	5840 x 2640 x 1900	4840 x 4070 x 1900	4840 x 6300 x 1900	4840 x 8530 x 1900	3840 x 6300 x 1900	3840 x 8530 x 1900
Sump capacity (l)	2 x 1400	2 x 1300	3 x 1300	4 x 1300	3 x 1000	4 x 1000
Delivery	mounted	2 components premounted,	3 components premounted,	4 components premounted,	3 components premounted,	4 components premounted,
		final installation provided				
		by the customer				
Article no., galvanized	H63-1009-C	H63-1050-A	H63-1051-A	H63-1052-A	H63-1060-A	H63-1061-A
Article no., galvanized and exterior painted	H63-2009-C	H63-2050-A	H63-2051-A	H63-2052-A	H63-2060-A	H63-2061-A
Accessories for model	SLT 6 x 3	SLT 5 x 4	SLT 5 x 6	SLT 5 x 8	SLT 4 x 6	SLT 4 x 8
Base sump tray insulation	H63-1029-A	H63-1030-A	H63-1031-A	H63-1032-A	H63-1033-A	H63-1034-A

#### ACCESSORIES FOR SAFETY STORAGE HOUSES

The storage of hazardous substances in LaCont Safety Storage Houses is simplified by means of a wide range of accessories. Not only the current and future legal regulations and requirements are fulfilled - even an easy and ergonomical work is going to be encouraged. E.g. a proper and clear arrangement is important when storing hazardous substances in small containers. The LaCont hazardous substances racks are suitable for this purpose. The grid rack sets consist of pre-assembled shelf supports on the SLH wall. The cantilever arms and the three grid levels (depth 500 mm) can be adjusted at the requested height.







Rack-Sets	Article no.
Grid rack set with 3 storage levels pre-mounted on container wall - Dimensions W x D (mm): 800 x 500*	H61-9011-C
Additional grid level (mm): 800 x 500*, incl. 2 cantilever arms	H61-9011-C1
Grid rack set with 3 storage levels pre-mounted on container wall - Dimensions W x D (mm): 1800 x 500*	H61-9012-C
Additional grid level (mm): 1800 x 500*, incl. 2 cantilever arms	H61-9012-C1
Grid rack set with 3 storage levels pre-mounted on container wall - Dimensions W x D (mm): 2600 x 500**	H61-9013-C
Additional grid level (mm): 2600 x 500**, incl. 3 cantilever arms	H61-9013-C1

 $\ast$  Load capacity 100 kg / level /  $\ast\ast$  Load capacity 150 kg / level

Accessories for increasing the load capacity / level	Article no.
Shelf supports vertical, pre-mounted	H61-9001-B
Shelf arm horizontal, 500 mm*	H61-9002-B

\* Load capacity per shelf arm 50 kg

In order to store containers, drums, pallets and IBCs securely and ergonomically in the safe storage facility, a forklift truck is not necessary. Due to the ramps the transport by means of drum cart or pallet truck is a "piece of cake". Depending on the application, the ramps are available with different lengths and pitch angles.

Ramps	Article no.
For drum cart	H61-9007-D
Dimensions L x W x H (mm) = 1200 x 1000 x 320,	
Material: steel checker plate, fire-galvanized	
For pallet truck	H61-9008-C
Dimensions L x W x H (mm) = 2900 x 1000 x 320,	
Material: steel checker plate, fire-galvanized	



Ramp for pallet truck, Article no. H61-9008-C



Appropriate lighting is to be ensured within a store for hazardous substances. (s. ASR A3.4). Electric lighting is not always necessary for this purpose. By means of an optional roof light strip, daylight or, of course, light sources outside the warehouse can also be used for the illumination in the bright season.

Roof light strip	Article no.
For the natural lighting of safety storage houses	On request!
Caution!!! Only suitable for the storage of non-flammable liquids!	

#### FITTINGS FOR SAFETY STORAGE HOUSES SLH / SLH-NB / SLT

With regard to explosion protection requirements, a distinction must always be made between the storage of water-endangering and flammable liquids.

#### **Electrical fittings (premounted)**

#### 1. For the storage of water-endangering liquids

When storing water-hazardous liquids, e.g. oils, lubricants, greases, etc., there are no special requirements for the explosion protection of the electrical installations.

Lighting			Article no.
LED Moisture-proof lamp 230 V, 43 W			Н61-9009-Е
Convection heating, not ex-proof,	2 kW / 230 V		
incl. collision protection	2 kW / 230 V	3 kW / 230 V	5 kW / 400 V
Frost-free storage for SLT type:	1 x 2 / 2 x 2 / 3 x 2	6 x 2 / 6 x 3	5 x 6 / 4 x 8
	4 x 2 / 5 x 2 / 4 x 3	5 x 4 / 4 x 6	5 x 8
Article no.	H63-9020-A	H63-9080-A	H63-9081-A

#### 2. For the storage of flammable liquids

When storing flammable liquids, e.g. paints, solvents, etc., a distinction is made between passive and active storage (see TRGS 509/510).

2.1 In the case of passive storage, no filling activities are carried out within the storehouse. In order to achieve the required air exchange, natural or technical ventilation (0.4 to 2-fold air exchange) is required.

For the passive storage of flammable liquids	Article no.
LED Lamp ex-zone II, 230 V, 40 W, effective luminous flex 6430 lm	H61-9090-B
Technical forced ventilation ex-proof (wall ventilator) 230 V / 50 Hz	H61-9006-C

2.2 In the case of active storage, filling activities are carried out within the storehouse. In order to achieve the required air exchange a technical forced ventilation (> 5-fold air exchange) is required only.

For the active storage of flammable liquids	Article no.
LED Lamp ex-zone I, 230 V, 40 W, effective luminous flex 6290 lm	H61-9091-B
Technical forced ventilation ex-proof (tube fan)	H61-9026-B
Exhaust air monitoring incl. flow sensor and signal horn for alarming*	H61-9053-B
Potential equalizing bar on the outside of the container as per DIN VDE	H63-9031-A

\* According to TRGS 510, a technical exhaust air monitoring system is to be installed in the case of at least two-fold air exchange (active storage)!

Heating ex-proof, T3 incl. collision protection	2 kW / 230 V	3 kW / 230 V	2 x 2 kW / 230 V	2 x 3 kW / 230 V
Frost-free storage for SLT type:	1 x 2 / 2 x 2 / 3 x 2	6 x 2 / 6 x 3	5 x 6 / 4 x 6	4 x 8 / 5 x 8
Passive storage	4 x 2 / 5 x 2 / 4 x 3	5 x 4		
Frost-free storage for SLT type:	1 x 2 / 2 x 2	5 x 2 / 6 x 2	6 x 3	5 x 4 / 5 x 6
Active storage	3 x 2 / 4 x 2	4 x 3		
Article no.	H63-9002-A	H63-9003-A	H63-9009-A	H63-9011-A

Convection heating, ex-proof, T3, incl. collision protection	6,9 kW / 400 V	9,3 kW / 400 V
Frost-free storage for SLT type: Active storage	4 x 6	4 x 8 / 5 x 8
Article no.	H63-9071-A	H63-9072-A

#### Plastic switch box

- IP 65 attached to the outside of the storehouse
- Incl. complete wiring of the electrical fittings
- To accommodate all fuses and controls

#### Switch box

All electrical fittings wired up to switch box

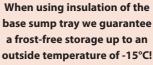


LED Moisture-proof lamp 230 V, 43 W, Article no. H61-9009-E



Convection heating 2 kW, not ex-proof, Article no. H63-9020-A







LED Lamp ex-zone II, 230 V, 40 W, Article no. H61-9090-B



Technical forced ventilation, ex-proof, Article no. H61-9006-C



Exhaust air monitoring, Article no. H61-9053-B



Switch box, Article no. H63-9007-A

Article no.

H63-9007-A



Heating, ex-proof, 2 kW / 230 V, Article no. H63-9002-A



Potential equalizing bar, Article no. H63-9031-A



Optional plug connection for SLH combination

Water protection compartment containers have proven for years as cost-effective solution according to regulations for the storage of hazardous substances in drums and KTC/IBCs. They carry out their duty in various places and under several operating conditions all over Europe.



Based on this experience and different customers needs we have extended our range by several new variants of water protection compartment containers. With this extensive complete range we are able to solve each user problem.

#### Advantages:

- Compact storage of hazardous substances with limited space
- Container construction makes a large variety of equipment options possible according to regulations of substances to be stored.
- By using various door and gate versions all WSCs are lockable and thus there is no access for unauthorized personnel concerning hazardous substances.
- By equipping with natural ventilation passive storage of flammable liquids is not a problem anymore, there are no additional costs and preparatory works for the operator (e.g. power connection).



- All WSCs can be equipped with thermo insulation for frost-free or tempered storage.
- Special heating systems can be agreed individually as requested by the operator (e.g. electric heating, hot water heating or steam heating)
- Without large expenses relocation of a WSC is possible at any time in the case of any change in location.



Concerning custom-made versions we do not have any problems with changed dimensions, higher sump capacities or other door versions!

#### PRACTICAL INFORMATION 9

- According to TRGS 510, no. 12.6.2 storage rooms have to be ventilated sufficiently. When the content of a room is up to 100 m<sup>3</sup> an air exchange of 0.4 fold at least is to be guaranteed. The entire room is to be classified in zone 2.
- Concerning technical ventilation according to ASR A3.6 (technical regulations for workplaces) malfunction or disorder has to be indicated by self-acting alarm. This is valid, if health hazards are expected in case of malfunction or disorder. During storage of combustible liquids it is always in case of being provided an air change of more than 0.4-times.
- The 5-fold air exchange can only be realized with a technical forced ventilation.
   For the operator this implies the installation of an electrical supply and that he has to bear the current electricity costs.
- By using natural ventilation 0.4-fold air exchange is possible. Without any extra costs for the operator due to constructional details, such as ventilation slots above the sump pallet.
- The effectivity of natural ventilation according to the regulations of DIBt is to be practically proved by an authorized testing institute, e.g. by means of dying out method.
- Our WSCs and safety storehouses are approved for storage of flammable liquids. Air exchange is tested and approved by an authorized testing institute.
- To make sure that you meet all legislative's requirements, please contact us we look forward to assisting you (even locally)!



**"Passive storage"** --> Containers will neither be opened, filled and/or emptied during storage.

**"Active storage"** --> Containers will be used as removal containers or sumps at the storage location or opened for other purposes.



#### OUTDOOR STORAGE OF VERTICAL DRUMS

Our standard: natural ventilation and lifting attachments for cranes!



#### Different versions of water protection compartment containers:

- Lockable hinged or sliding doors
- Ex-proof version with forced ventilation
- With PE-HD tray inserts for storing particularly aggressive media
- Larger sump capacities if required, e.g. for storage in water protection areas or for fire-fighting water retention



Water protection compartment containers are for universal use for the storage of drums directly on the grid supports or on euroor chemical pallets. Water protection compartment containers are particularly suitable for the storage of mixed, non-standardized container sizes.

Series WSC-F-E is intended for one-sided operation; Series WSC-F-D is for two-sided use with lockable doors on each side.



All water protection compartment containers with hinged doors equipped with locking bar.

Our standard, your benefits: All the water protection compartment containers shown on pages 160-165 are provided with natural ventilation for the passive storage of flammable substances (see practical information on page 159). This means that they can be used even more flexibly, even if the type of hazardous goods to be stored is changed!

Model	WSC-F-E.1-30	WSC-F-E.2-30	WSC-F-E.3-30	WSC-F-D.1-30	WSC-F-D.2-30	WSC-F-D.3-30
Number of levels	1	2	3	1	2	3
External dimensions W x D x H* (mm)	3120 x 1450 x 2175	3120 x 1450 x 3080	3120 x 1450 x 4480	3120 x 2770 x 2200	3120 x 2770 x 3105	3120 x 2770 x 4505
Internal compartment dimensions						
W x D x H** (mm)	3000 x 1300 x 1795	3000 x 1300 x 1250	3000 x 1300 x 1250	3000 x 1300 x 1795	3000 x 1300 x 1250	3000 x 1300 x 1250
Sump capacity (I)	650	650	650	2 x 650	2 x 650	2 x 650
Capacity, 200 liter drums	10 directly on	20 directly on	30 directly on	20 directly on	40 directly on	60 directly on
(examples)	grid support or 8 on	grid support or 16 on	grid support or 24 on	grid support or 16 on	grid support or 32 on	grid support or 48 on
	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or
	6 on euro-pallets	12 on euro-pallets	18 on euro-pallets	12 on euro-pallets	24 on euro-pallets	36 on euro-pallets
Article no., with hinged doors						
and natural ventilation	C22-5004-C	C22-5014-C	C22-5024-C	C22-5034-C	C22-5044-C	C22-5054-C

\* External dimensions plus base plates and rain discharge plate



#### OUTDOOR STORAGE OF VERTICAL DRUMS

Our standard: natural ventilation and lifting attachments for cranes!









For your attention:

All Water protection compartment containers with an external height of more than 3660 mm are delivered as part-assemblies.

Self-assembly according to the supplied instructions is easy and after only a short time you can use your water protection compartment container for storing hazardous substances.

All the necessary connections for the assembly, e.g. floor anchors, nuts and bolts, etc. are contained in the standard equipment. Optionally you can have the assembly carried out by one of our teams of specialists. This applies for all water protection compartment containers.



WSC-F-E.2-30, with hinged doors and natural ventilation, Article no. C22-5014-C

Model	WSC-F-E.1-60	WSC-F-E.2-60	WSC-F-E.2-100	WSC-F-E.3-60	WSC-F-D.1-60	WSC-F-D.2-60	WSC-F-D.3-60
Number of levels	1	2	2	3	1	2	3
External dimensions W x D x H* (mm)	6180 x 1530 x 2175	6180 x 1530 x 3080	9240 x 1540 x 3080	6220 x 1530 x 4480	6180 x 2930 x 2200	6180 x 2930 x 3105	6220 x 2930 x 4505
Internal compartment dimensions							
W x D x H** (mm)	3000 x 1300 x 1730	3000 x 1300 x 1250	3000 x 1300 x 1250	3000 x 1300 x 1250	3000 x 1300 x 1730	3000 x 1300 x 1250	3000 x 1300 x 1250
Sump capacity (l)	2 x 650	2 x 650	3 x 650	2 x 650	4 x 650	4 x 650	4 x 650
Capacity, 200 liter drums	20 directly on	40 directly on	60 directly on	60 directly on	40 directly on	80 directly on	120 directly on
(examples)	grid support or 16 on	grid support or 32 on	grid support or 48 on	grid support or 48 on	grid support or 32 on	grid support or 64 on	grid support or 96 on
	chemical pallets or						
	12 on euro-pallets	24 on euro-pallets	36 on euro-pallets	36 on euro-pallets	24 on euro-pallets	48 on euro-pallets	72 on euro-pallets
Article no., with sliding doors							
and natural ventilation	C22-5104-C	C22-5114-C	C22-5252-C	C22-5124-C	C22-5134-C	C22-5144-C	C22-5154-C

\* External dimensions plus base plates and rain discharge plate



#### VERTICAL STORAGE OF CHEMICAL PALLETS OUTDOORS

Our standard: natural ventilation and lifting attachments for cranes!



These water protection compartment containers have been specially designed for the storage of chemical pallets. Optimal utilisation of the available floor space has been achieved for a minimal amount of investment per drum storage place. This series has proven itself to be ideal for storing goods on pallets, e.g. in the chemical industry, in paint factories, etc. and everywhere that sophisticated logistics are important. The series F-E water protection compartment containers are for use from one side only. Versions for use from both sides are available on request!



WSC-F-E.2-80, with sliding doors and natural ventilation, Article no. C22-5324-C



	Prove March 197 and 198				
Model	WSC-F-E.2-40	WSC-F-E.3-40	WSC-F-E.2-80	WSC-F-E.2-120	WSC-F-E.3-80
Number of levels	2	3	2	2	3
External dimensions W x D x H* (mm)	4100 x 1450 x 3080	4100 x 1450 x 4480	8100 x 1530 x 3080	12100 x 1540 x 3080	8100 x 1530 x 4480
Internal compartment dimensions					
W x D x H** (mm)	3900 x 1300 x 1250	3900 x 1300 x 1250	3900 x 1300 x 1250	3900 x 1300 x 1250	3900 x 1300 x 1250
Sump capacity (l)	800	800	2 x 800	3 x 800	2 x 800
Capacity, 200 liter drums	24 on chemical pallets	36 on chemical pallets	48 on chemical pallets	72 on chemical pallets	72 on chemical pallets
(examples)	or 16 on euro-pallets	or 24 on euro-pallets	or 32 on euro-pallets	or 48 on euro-pallets	or 48 on euro-pallets
Article no., with hinged doors					
and natural ventilation	C22-5304-C	C22-5314-C	-	-	-
Article no., with sliding doors					
and natural ventilation	-	-	C22-5324-C	C22-5254-C	C22-5334-C

\* External dimensions plus base plates and rain discharge plate



#### OUTDOOR STORAGE OF HORIZONTAL 200 LITER DRUMS

These water protection compartment containers for horizontal storage are designed for filling processes within the container. In the lowest storage level is in front of the drums a space consisting of fire-galvanized grids for easy filling from drums into cans or other small containers.





#### WSC-F-E.2-30/LL, Article no. C22-5401-B



Combination of horizontal and vertical storage (rotating drum support and can support optional) - prices on request !



<u>Accessory:</u> Technical forced ventilation, ex-proof, Article no. H61-9006-C, for active storage of flammable liquids



WSC-F-E.2-60/LL, Article no. C22-5405-B

WSC-F-E.2-30/LL	WSC-F-E.3-30/LL	WSC-F-E.2-60/LL	WSC-F-E.3-60/LL
2	3	2	3
3130 x 1450 x 2600	3130 x 1450 x 3550	6200 x 1530 x 2600	6240 x 1530 x 3550
3010 x 1300 x 800	3010 x 1300 x 800	3010 x 1300 x 800	3010 x 1300 x 800
650	650	2 x 650	2 x 650
8	12	16	24
C22-5401-B	С22-5403-В	-	-
-	-	C22-5405-B	C22-5407-B
	<b>WSC-F-E.2-30/LL</b> 2 3130 x 1450 x 2600 3010 x 1300 x 800 650 8 <b>C22-5401-B</b>	WSC-F-E.2-30/LL         WSC-F-E.3-30/LL           2         3           3130 x 1450 x 2600         3130 x 1450 x 3550           3010 x 1300 x 800         3010 x 1300 x 800           650         650           8         12           C22-5401-B         C22-5403-B	WSC-F-E.2-30/LL         WSC-F-E.3-30/LL         WSC-F-E.3-30/LL           2         3         2           3130 x 1450 x 2600         3130 x 1450 x 3550         6200 x 1530 x 2600           3010 x 1300 x 800         3010 x 1300 x 800         3010 x 1300 x 800           650         650         2 x 650           8         12         16           C22-5401-B         C22-5403-B         -

\* External dimensions plus base plates and rain discharge plate

Water protection compartment

suitable for storing IBCs / KTCs. They have been proven in use under especially rough industrial conditions, such as intermediate storage facility for hazardous waste, in the electroplating industry. The series F-E water protection compartment containers are for use from one side only. Versions for use from both sides are available on request.

containers are particularly



#### OUTDOOR STORAGE FOR KTCs / IBCs

Our standard: natural ventilation and lifting attachments for cranes!





STATIC APPROVED



WSC-F-E.1-27, with hinged doors and natural ventilation, Article no. C22-5236-C





WSC-F-E.2-54, with sliding doors and natural ventilation, Article no. C22-5240-C

Model	WSC-F-E.1-27	WSC-F-E.2-27	WSC-F-E.1-54	WSC-F-E.2-54
Number of levels	1	2	1	2
External dimensions W x D x H* (mm)	2820 x 1450 x 2190	2820 x 1450 x 3575	5580 x 1530 x 2245	5580 x 1530 x 3575
Internal compartment dimensions				
W x D x H** (mm)	2700 x 1300 x 1730	2700 x 1300 x 1450	2700 x 1300 x 1720	2700 x 1300 x 1450
Sump capacity (l)	1000	1000	2 x 1000	2 x 1000
Capacity, KTCs / IBCs	2	4	4	8
Article no., with hinged doors				
and natural ventilation	C22-5236-C	C22-5241-C	-	-
Article no., with sliding doors				
and natural ventilation	-	-	C22-5226-C	С22-5240-С

\* External dimensions plus base plates and rain discharge plate



#### WATER PROTECTION COMPARTMENT CONTAINERS



C22-5224-C

C22-5234-C

\* External dimensions plus base plates and rain discharge plate

and natural ventilation

\*\* Compartment dimensions and stated capacities without considering electrical installations (ventilation, lighting etc.)

C22-5251-C



#### FROST-FREE AND HEATED OUTDOOR STORAGE

#### **DESCRIPTION:**

As a result of the development of the "WSC Thermocontainers" designed for industrial use it is possible to store thermally sensitive goods safely and independent of the outdoor temperature.

#### **HEATING:**

The WSC Thermocontainers can be laid out to utilise most of the different types of energy available in factories.

#### **INSULATION:**

All walls, roofs and floors are completely insulated with thermally insulating made from hardly inflammable or incombustible sandwich elements.





WSC-T-E.3-70

The practically proven construction of the WSC Thermocontainer provides the optimal solution for each application.

Whether for use with fork-lift trucks, for storing small or large containers - each requirement can be met.

All water protection compartment containers shown on pages 160 to 165 can be supplied in thermally insulated versions!

Model	WSC-T-E.1-30	WSC-T-E.2-30	WSC-T-E.3-30	WSC-T-E.1-60	WSC-T-E.2-60	WSC-T-E.3-60
Number of levels	1	2	3	1	2	3
External dimensions W x D x H* (mm)	3290 x 1440 x 2210	3290 x 1440 x 3180	3290 x 1440 x 4560	6360 x 1550 x 2280	6360 x 1550 x 3180	6400 x 1550 x 4580
Internal compartment dimensions						
W x D x H** (mm)	3010 x 1300 x 1730	3010 x 1300 x 1250	3010 x 1300 x 1250	3010 x 1300 x 1730	3010 x 1300 x 1250	3010 x 1300 x 1250
Sump capacity (l)	650	650	650	2 x 650	2 x 650	2 x 650
Capacity, 200 liter drums	10 directly on	20 directly on	30 directly on	20 directly on	40 directly on	60 directly on
(examples)	grid support or 8 on	grid support or 16 on	grid support or 24 on	grid support or 16 on	grid support or 32 on	grid support or 48 on
	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or	chemical pallets or
	6 on euro-pallets	12 on euro-pallets	18 on euro-pallets	12 on euro-pallets	24 on euro-pallets	36 on euro-pallets
Article no., with hinged doors	C22-5003-T	C22-5013-T	C22-5023-T	-	-	-
Article no., with sliding doors	-	-	-	C22-5103-T	C22-5113-T	C22-5123-T

\* External dimensions plus base plates and rain discharge plate

\*\* Compartment dimensions and stated capacities without considering electrical installations (ventilation, lighting, heating, cooling etc.)



WSC-T-E.2-27

#### FROST-FREE AND HEATED OUTDOOR STORAGE

#### **GENERAL INFORMATION:**

- Protected against unauthorized access by lockable sliding or hinged doors
- Sliding or hinged doors always 2-part on longer side as standard
- Including heating systems bases on hot water, electricity, steam or air circulation possible
- Can be equipped with air-conditioning
- All electrical installations in ex-proof version available
- With ground connection to prevent hazardous electrostatic charges









External switchbox



Convection heating, not ex-proof



Ex-proofed heating 1,5 kW



#### **HEATED CHAMBERS**

Electric Heating / Cooling chamber for drum storage

Special substances used in production often need to be additionally heated, melted or cooled down before they can be used in the production processes. These heated chambers have been specially designed for such applications.





Thermo / Cooling container for 4 x 1000 liter KTC/IBC

> The large number of different-sized heating chambers available guarantees the accommodation of differing storage amounts and container sizes. The heating and cooling capacities are calculated and realized to suit the requirements of the particular application.

Heating / Cooling container for 7 x 1000 liter KTC/IBC



Thermal insulated water protection compartment container with separate technical room

Electric heating chamber for 12 x 200 liter drums



Electric heating / cooling chamber for storing drums and small containers



In addition to our various standard container sizes we are also able to manufacture water protection compartment containers to your own particular wishes and requirements.





- Handling in the storage area is carried out with a narrow forklift truck.
- Due to the small aisle width of 1940 mm additional storage capacity could be realized.





WATER PROTECTION COMPARTMENT CONTAINERS WITH SUMP CAPACITY OF 100%



WATER PROTECTION COMPARTMENT CONTAINERS WITH EXHAUST AIR MONITORING





WATER PROTECTION COMPARTMENT CONTAINERS WITH PROJECTING ROOF

WATER PROTECTION COMPARTMENT CONTAINERS WITH FOLDING DOORS



WALK-IN WATER PROTECTION COMPARTMENT CONTAINERS / CUSTOM-MADE





#### WATER PROTECTION COMPARTMENT CONTAINER - PLANT



## We are pleased to plan your storage system according to the current legal requirements!

#### SAFETY DISTANCE:

Please observe a safe distance of at least 10 meters to surrounding buildings to avoid mutual fire exposure.

- Modular design or customized adjustment; we will find the best and favorably priced solution for you!
- Our storage system enables you to store various hazardous substances in compliance with the legal requirements!









THERMO WATER PROTECTION COMPARTMENT CONTAINER - PLANT



**Operating equipment** storage

- Corridor roof with skylight panel
- Convection heating
- Technical forced ventilation
- Corridor lining with safety floor elements







# Finished goods storage

- Storage capacity
   100 tons
- Swiveling fire fighting water retention barrier

#### WSC-UNIT AS AN AIR-CONDITIONED AROMA STORAGE





 Central control unit (control cabinet, subdistribution, cooling unit)



• Separate fire compartment with integrated fire protection container



• Corridor closure ahead with sky light panel ♦ Corridor lighting



#### FIRE-SAFETY CONTAINER-FARM



- Small aisle width due to the use of sliding gates
- Fire protection containers were integrated in the building complex (first floor)



#### WAREHOUSE FOR FLAMMABLE LIQUIDS



- Water protection container with natural ventilation
- Separate fire compartments due to fire barrier





- Waste material intermediate store
- Storage of monitoring waste

#### PESTICIDE STORAGE



- Consisting of safety storehouses with sheet steel roofing
- Infeed for fire fighting water
- Retention for fire fighting water

- Thermal insulated PSM store, for frost-free storage
- Corridor light strip roofing
- Fire water retention with rotatable barrier





- Compact storage hall with modular surface protection system
- Fire fighting water retention with extensible barrier







Walk-in fire protection container classic F 90 steel page 179



Walk-in fire protection container comfort F 90 steel page 180



Walk-in fire protection container premium F 90 steel page 181



Walk-in fire protection container superior F 90 steel

page 181



Fire protection container F90 steel - drum and KTC storage as well as pallet storage page 182-185



The safe handling of lithium-ion batteries (Accumulator) from page 186

#### LACONT FIRE PROTECTION CONTAINER

LaCont Fire Safety Container are in accordance with all legal requirements, especially for the storage of flammable liquids.

The components used are in accordance with Euronorm EN 13501 (El90) fire resistant. This ensures that all components in terms of fire protection at least 90 minutes are suitable as room closure





Due to the large type and equipment variety on fire protection containers, an optimal storage solution can be created for everyone. Therefore observance of safety distances can be renounced. Required space is reducing to the storage space of the container.

#### FIELD OF APPLICATION:

Fire protection container F90 are suitable for the storage of:

- ◆ Water-endangering liquids of GHS category 1-4
- Flammable liquids of GHS category 1-3 —
- Toxic and very toxic substances ———
- Oxidizing substances —
- Waste requiring supervision
- Organic peroxides ——



#### LACONT FIRE PROTECTION CONTAINER - WALK-IN CLASSIC

- Fire protection container with components according to DIN EN 13501 (EI 90)
- ٠ Suitable for indoor and outdoor use
- Steel sump as per WHG with grid cover ٠
- Doors close automatically if fire occurs
- Lifting attachments for cranes (for empty transport only) as standard
- Outer body painted in RAL 7035 light grey
- Wide range of accessories

# FIRE BEHAVIOR

- If fire occurs the door, door gaps, air in- and outlet slots are sealed hermetically
- In versions with Thermolock system doors can be left open
- during the work process





WSC 2-CL/F90, Article no. C64-4009-B, for storing small containers

#### WSC 5-CL/F90, Article no. C64-4014-B, for storing small containers and drums, with optional grid shelving

Model	WSC 2-CL/F90	WSC 3-CL/F90	WSC 4-CL/F90	WSC 5-CL/F90	WSC 6-CL/F90	WSC 7-CL/F90	WSC 8-CL/F90
External dimensions W x D x H (mm)	170 x 2500 x 2440	3000 x 2500 x 2440	4000 x 2500 x 2440	5000 x 2500 x 2440	6000 x 2500 x 2440	7000 x 2500 x 2440	8000 x 2500 x 2440
Internal dimensions W x D x H (mm)	930 x 2100 x 2120	2750 x 2100 x 2120	3750 x 2100 x 2120	4750 x 2100 x 2120	5750 x 2100 x 2120	6750 x 2100 x 2120	7750 x 2100 x 2120
Sump capacity (l)	600	800	1200	1400	1800	2 x 1100	2 x 1200
Max. load (kg/m²)	1000	1000	1000	1000	1000	1000	1000
Article no. door W x H (mm) 1250 x 2000 (SD)	* C64-4008-B	C64-4010-B	C64-4012-B	C64-4014-B	C64-4016-B	C64-4018-B	C64-4020-B
Article no. door W x H (mm) 1750 x 2000 (DD	)** C64-4009-B	C64-4011-B	C64-4013-B	C64-4015-B	C64-4017-B	C64-4019-B	C64-4021-B

\* SD = single door \*\* DD = double door

Accessories	Article no.	
Ex-proof forced ventilation	C64-3100-A	
LED Lamp ex-zone II, 230 V, 40 W, effective luminous flex 6320 lm	C64-3125-A	
LED Lamp ex-zone I, 230 V, 40 W, effective luminous flex 6320 lm	C64-3124-A	
Ex-proof heating 2 kW	C64-3103-A	
Ex-proof heating 3 kW	C64-3104-A	
Door hold-open device for single door	C64-3106-A	
Door hold-open device for double door	C64-3107-A	
Ex-proof exhaust air monitoring with signal horn	C64-3109-A	
Switch box	C64-3114-A	
Accessories	Article no.	
Shelf for small containers, basic unit with 4 grid-type storage levels, W x D x H (mm) = 1060 x 600 x 2000	C64-2080-A	
Shelf for small containers, extension unit with 4 grid-type storage levels, $W \times D \times H$ (mm) = 1010 x 600 x 2000	C64-2081-A	
Shelf for small containers, basic unit with 4 grid-type storage levels, W x D x H (mm) = 1360 x 600 x 2000	C64-2085-A	
Shelf for small containers, extension unit with 4 grid-type storage levels, W x D x H (mm) = 1310 x 600 x 2000		
Drive-on ramp W x L (mm) = 1000 x 800 for drum carts	C64-3150-A	

Drive-on ramp W x L (mm) = 1000 x 800 for drum carts

Drive-on ramp W x L (mm) = 1000 x 1200 for pallet truck

C64-3151-A



#### LACONT FIRE PROTECTION CONTAINER - WALK-IN COMFORT

#### **Execution:**

Technically as WSC Classic on page 179, but <u>internal height 2520 mm</u> and usable <u>storage depth 2100 mm.</u>

- Fire protection container with components according to DIN EN 13501 (EI 90)
- Suitable for indoor and outdoor use
- Steel sumps as per WHG with grid cover
- Doors close automatically if fire occurs
- Lifting attachments for cranes (for empty transport only) as standard



**Ex-proof heating** 





Equipped with shelving for use as small container store

WSC 4-CO/F90, Article no. C64-4040-B, with single door and optional drive-on ramp

Accessories such as forced ventilation, heating, illumination and shelving can be found on page 179!

Model	WSC 2-CO/F90	WSC 3-CO/F90	WSC 4-CO/F90	WSC 5-CO/F90	WSC 6-CO/F90	WSC 7-CO/F90	WSC 8-CO/F90
External dimensions W x D x H (mm)	2170 x 2500 x 2840	3000 x 2500 x 2840	4000 x 2500 x 2840	5000 x 2500 x 2840	6000 x 2500 x 2840	7000 x 2500 x 2840	8000 x 2500 x 2840
Internal dimensions W x D x H (mm)	1930 x 2100 x 2520	2750 x 2100 x 2520	3750 x 2100 x 2520	4750 x 2100 x 2520	5750 x 2100 x 2520	6750 x 2100 x 2520	7750 x 2100 x 2520
Sump capacity (l)	600	800	1200	1400	1800	2 x 1100	2 x 1200
Max. load (kg/m²)	1000	1000	1000	1000	1000	1000	1000
Article no. door W x H (mm) 1250 x 2000 (SD) <sup>3</sup>	C64-4036-B	C64-4038-B	C64-4040-B	C64-4042-B	C64-4044-B	C64-4046-B	C64-4048-B
Article no. door W x H (mm) 1750 x 2000 (DD)	** С64-4037-В	C64-4039-B	C64-4041-B	C64-4043-B	C64-4045-B	C64-4047-B	C64-4049-B

\* SD = single door \*\* DD = double door



#### LACONT FIRE PROTECTION CONTAINER - WALK-IN PREMIUM

#### **Execution:**

Technically as WSC Classic on page 179, but <u>internal height 2120 mm</u> and usable <u>storage</u> <u>depth 2550 mm</u>.



Accessories such as forced ventilation, heating, illumination and shelving can be found on page 179!



Article no. C64-4031-B, with double door

Model	WSC 2-PR/F90	WSC 3-PR/F90	WSC 4-PR/F90	WSC 5-PR/F90	WSC 6-PR/F90	WSC 7-PR/F90	WSC 8-PR/F90
External dimensions W x D x H (mm)	2170 x 2950 x 2440	3000 x 2950 x 2440	4000 x 2950 x 2440	5000 x 2950 x 2440	6000 x 2950 x 2440	7000 x 2950 x 2440	8000 x 2950 x 2440
Internal dimensions W x D x H (mm)	1930 x 2550 x 2120	2750 x 2550 x 2120	3750 x 2550 x 2120	4750 x 2550 x 2120	5750 x 2550 x 2120	6750 x 2550 x 2120	7750 x 2550 x 2120
Sump capacity (l)	700	1000	1400	1800	2 x 1100	2 x 1300	2 x 1500
Max. load (kg/m <sup>2</sup> )	1000	1000	1000	1000	1000	1000	1000
Article no. door W x H (mm) 1250 x 2000 (SD)	* C64-4022-B	C64-4024-B	C64-4026-B	C64-4028-B	C64-4030-B	C64-4032-B	C64-4034-B
Article no. door W x H (mm) 1750 x 2000 (DD)	)** C64-4023-B	C64-4025-B	C64-4027-B	C64-4029-B	C64-4031-B	C64-4033-B	C64-4035-B

\* SD = single door \*\* DD = double door

#### LACONT FIRE PROTECTION CONTAINER - WALK-IN SUPERIOR



WSC 4-SU/F90, Article no. C64-4054-B, with single door



#### **Execution:**

Technically as WSC Classic on page 179, but with the largest storage volume of all WSCs, **internal height 2520 mm** and usable **storage depth 2550 mm**.



Accessories such as forced ventilation, heating, illumination and shelving can be found on page 179!

Model	WSC 2-SU/F90	WSC 3-SU/F90	WSC 4-SU/F90	WSC 5-SU/F90	WSC 6-SU/F90	WSC 7-SU/F90	WSC 8-SU/F90
External dimensions W x D x H (mm)	2170 x 2950 x 2840	3000 x 2950 x 2840	4000 x 2950 x 2840	5000 x 2950 x 2840	6000 x 2950 x 2840	7000 x 2950 x 2840	8000 x 2950 x 2840
Internal dimensions W x D x H (mm	1930 x 2550 x 2520	2750 x 2550 x 2520	3750 x 2550 x 2520	4750 x 2550 x 2520	5750 x 2550 x 2520	6750 x 2550 x 2520	7750 x 2550 x 2520
Sump capacity (l)	700	1000	1400	1800	2 x 1100	2 x 1300	2 x 1500
Max. load (kg/m²)	1000	1000	1000	1000	1000	1000	1000
Article no. door W x H (mm) 1250 x 2000 (SD)	* С64-4050-В	C64-4052-B	C64-4054-B	C64-4056-B	C64-4058-B	C64-4060-B	C64-4062-B
Article no. door W x H (mm) 1750 x 2000 (DD)	** C64-4051-B	C64-4053-B	C64-4055-B	C64-4057-B	C64-4059-B	C64-4061-B	C64-4063-B

#### FIRE PROTECTION CONTAINER F90 STEEL



#### LACONT FIRE PROTECTION CONTAINER FOR DRUM STORAGE

- ◆ Fire protection container with components according to DIN EN 13501 (EI 90)
- For the storage of drums with one-winged door
- Suitable for indoor and outdoor use
- Steel sumps as per WHG with grid cover
- Doors close automatically if fire occurs
- Outer body painted in RAL 7035 light grey
- Wide range of accessories





WSC-Fass 4/F90, Article no. C64-4002-B



- If fire occurs the door, door gaps, air in- and outlet slots are sealed hermetically
- In versions with Thermolock system doors can be left open during the work process







- with signal horn
- Door hold-open device



C64-3114-A

C64-3113-A

C64-3109-A

C64-3110-A



**Optional external lighting** 



Ex-proof exhaust fan incl. exhaust air monitoring

Model	WSC-Fass 2/F90	WSC-Fass 4/F90
External dimensions W x D x H (mm)	1720 x 1540 x 2325	1720 x 1840 x 2325
Internal dimensions W x D x H (mm)	1360 x 950 x 1900	1360 x 1250 x 1900
Sump capacity (l)	220	220
Capacity, 200 liter drum	2 on Euro pallet	4 on chemical pallet
Article no.,		
door W x H (mm) = 1350 x 2000 (SD)	C64-4001-B	С64-4002-В
Accessories		Article no.
Ex-proof forced ventilation		C64-3116-A
LED Lamp ex-zone II, 230 V, 15 W, effective luminous fle	H61-9131-A	
Ex-proof heating 2 kW		C64-3103-A
Door hold-open device for single door		C64-3106-A

Switch box

Potential equalizing bar

Ex-proof exhaust air monitoring with signal horn

Combination of flashing light and sound generator



#### LACONT FIRE PROTECTION CONTAINER FOR KTC/IBC STORAGE

- Fire protection container with components according to DIN EN 13501 (EI 90)
- For the storage of KTC with one- or two-winged door(s),

#### Suitable for indoor and outdoor use

- Steel sumps as per WHG with grid cover
- Doors close automatically if fire occurs
- Outer body painted in RAL 7035 light grey
- Wide range of accessories





WSC-KTC 2/F90, Article no. C64-4004-B

#### FIRE BEHAVIOR

-`@`

- If fire occurs the door(s), door gaps, air in- and outlet slots are sealed hermetically
- In versions with Thermolock system doors can be left open during the work process

Model	WSC-KTC 1/F90	WSC-KTC 2/F90
External dimensions W x D x H (mm)	1730 x 1840 x 2665	3270 x 1770 x 2480
Internal dimensions W x D x H (mm)	1360 x 1260 x 1900	2900 x 1300 x 1900
Sump capacity (l)	1000	1000
Capacity, KTC/IBC	1	2
Article no.,		
door W x H (mm) = 1350 x 2000 (SD)	C64-4003-B	-
Article no.,		
door W x H (mm) = 2900 x 2000 (DD)	-	C64-4004-B

Accessories	Article no.
Ex-proof forced ventilation	C64-3116-A
LED Lamp ex-zone II, 230 V, 15 W, effective luminous flex 2170 lm	H61-9131-A
Ex-proof heating, 2 kW	C64-3103-A
Door hold-open device for single door	C64-3106-A
Door hold-open device for double door	C64-3107-A
Switch box	C64-3114-A
Potential equalizing bar	C64-3113-A
Ex-proof exhaust air monitoring with signal horn	C64-3109-A
Combination of flashing light and sound generator	C64-3110-A



WSC-KTC 1/F90, Article no. C64-4003-B



#### LACONT FIRE PROTECTION CONTAINER FOR PALLET STORAGE WITH DOUBLE DOORS

This serie is particularly suitable for storing goods on euro- or chemical pallets or KTC/IBC. The Thermolock system allows the doors to be left open during the work process. Therefore the BSC can be used by one person without any problems.

#### **Execution:**

- Fire protection container with components according to DIN EN 13501 (EI 90)
- Suitable for indoor and outdoor use
- Steel sumps as per WHG with grid cover
- Doors close automatically if fire occurs
- Outer body painted in RAL 7035 light grey or RAL 5015 - sky blue

i

In order to realize the optimum storage conditions a wide range of accessories is available such as technical forced ventilation, lighting, heating, cooling system, door hold-open device, fire warning device!



WSC-T-E.2-30 DF/F90, Article no. C64-3001-A



FIRE BEHAVIOR

- If fire occurs the doors, door gaps, air in- and outlet slots are sealed hermetically
- In versions with Thermolock system doors can be left open during the work process



Air exhaust duct with K-90 shut-off device



\* Compartment dimensions and stated capacities without considering electrical installations (ventilation, heating, etc.)



WSC-T-E.2-54 DF/F90, Article no. C64-3004-A



#### LACONT FIRE PROTECTION CONTAINER FOR PALLET STORAGE WITH SLIDING DOORS

The use of sliding doors reduces the space requirement of the fire protection store to the base area of the container only. Additional and expensive storage space is not required and can be used for other purposes.

#### **Execution:**

- ◆ Fire protection container with components according to DIN EN 13501 (EI 90)
- Suitable for indoor and outdoor use
- Steel sumps as per WHG with grid cover
- Doors close automatically if fire occurs
- Outer body painted in RAL 7035 light grey or RAL 5015 sky blue





- If a fire occurs the doors close automatically
- Doors, door gaps, air in- and outlet slots are sealed hermetically





Control cabinet with central control and operating elements



With a fire protection certificate

In order to realize the optimum storage conditions a wide range of accessories is available such as technical forced ventilation, lighting, heating, cooling system, door hold-open device, fire warning device!



WSC-T-E.2-80 ST/F90, Article no. C64-3013-A, in special color

Model	WSC-T-E.2-70 ST/F90	WSC-T-E.2-80 ST/F90
External dimensions W x D x H (mm)	7740 x 1900 x 3700	8480 x 1900 x 3700
Compartment dimensions W x D x H* (mm)	3380 x 1300 x 1465	3900 x 1300 x 1500
Number of storage levels	2	2
Sump capacity (I)	2 x 1000	2 x 1000
Max. load (kg/m <sup>2</sup> )	1500	1500
Capacity, 200 liter drums on euro- / chemical pallets	24 / 32	32 / 48
Capacity, 1000 liter KTCs/IBCs	12	12
Number of sliding doors	2	2
Article no.	C64-3012-A	C64-3013-A

Article no. C64-3012-A

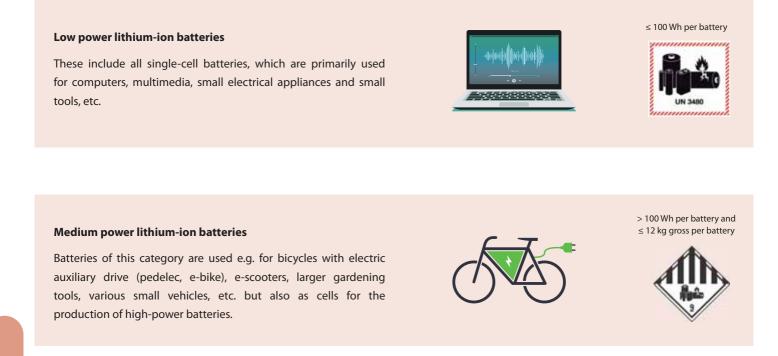
\* Compartment dimensions and stated capacities without considering electrical installations (ventilation, heating, etc.)

#### **PRACTICAL INFORMATION 10**

Lithium-ion batteries and accumulators are dangerous goods in **the sense of transport law.** During transport, they are subject to the dangerous goods regulations. The ADR (regulations for the transport of dangerous goods) assign lithium-ion batteries as dangerous goods to class 9, therefore they are **classified as particularly critical**.

With regard to the **safe and correct storage** of lithium-ion batteries, there is currently no clearly defined legal basis, which represents an ever greater challenge - not only for companies. The operator currently has no other option than to develop the best possible storage concept for his individual needs, with regard to a risk assessment. As a basis for the risk assessment - with the goal of keeping the dangers to people and the environment as low as possible - the VdS 3103 (publication of German property insurers for loss prevention) an the VdS 3856 can be consulted in addition to the specifications of the manufacturers (e.g. the operating instructions). These guidelines mainly discribes the preventive steps for the storage of lithium-ion batteries, e.g. the fire-resistant F90 separation of storage areas for this type of battery.

#### Lithium-ion batteries are currently classified into 3 categories:



#### High power lithium-ion batteries

Batteries in this category are characterised by a particularly high power which results from the combination and linking of multiple medium power cells. > 100 Wh per battery and/or > 12 kg gross per battery



Especially the storage of **low- and medium-power lithium-ion batteries**, as they are used e.g. in machine tools, e-bikes or laptops, is a much-discussed topic in practical use. This is mainly caused by the fact that the increasing number of batteries on the market is leading to more and more incidents, resulting in considerable personal injury and damage to property!

## 5.2. Safe collection, transport and storage of lithium-ion batteries (Accumulator)...





Battery concrete cabinet BBS page 188-189



LiBa®Barrel for the safe collection, storage and transport of lithium-ion batteries page 190



LiBa®Pac for the safe shipping of lithium-ion batteries page 190



Transport box K 470 - Akku Safe for the safe transport and storage of lithium-ion batteries

page 191



Transport box K 470 - Akku Safe Universal for the safe transport and storage of lithium-ion batteries page 191



The all-in-one solution - LiBa®Box for the safe transport and storage of lithium-ion batteries

page 191

#### BATTERY CONCRETE CABINET BBS



Utility model protection

#### BATTERY CONCRETE CABINET BBS FOR SAFE STORAGE OF LITHIUM-ION BATTERIES

**Explosion test** 

**BAM Berlin** 

FIRE RESISTANCE F90

#### Technical description concrete body:

- Concrete cabinet made of prefabricated reinforced concrete parts with a fire resistance class F90
- Water impermeable concrete C 35/45 according to EN 206-1, XC4, XD1, XF1, XA1
- Visible sides smooth, all visible edges chamfered
- Roof pitch to rear wall with drip edge
- For forklift transport 2 x 220 x 100 mm entry opening for forklift forks
- DBGM 20 2023101699

#### Design of sump pallet:

- Base sump pallet made from 3 mm galvanized sheet steel
- Liquid-tight welded according to WHG -

#### Ü-sign according to StawaR

Sump capacity 30 liter



#### Pressure release

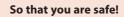
- Ceiling plate with opening and pressure relief dome
- With gas management incl. fleece mat for filtering the harmful gases in case of accident



BBS, Article no. C62-2015-B, with optional exterior painting



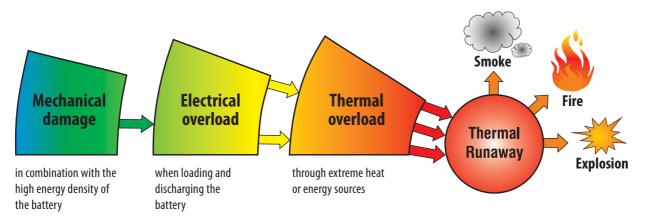
Product video: Lithium-ions safety storage in LaCont Battery Concrete Cabinet BBS



According to the ADR\*, lithium-ion batteries are classified as class 9 dangerous goods and are thus classified as particularly critical. Safe storage with regard to fire, smoke and explosion as well as fire-resistant separation from other areas is therefore essential.

\*Regulations for the transport of dangerous goods

#### Hazards in handling with lithium-ion batteries ---> Thermal Runaway





#### BATTERY CONCRETE CABINET BBS FOR SAFE STORAGE OF LITHIUM-ION BATTERIES

#### T90-1 fire protection door BRM 1100 x 1600 mm

- In accordance with the general technical approval of the DIBt Berlin
- Lockable
- With additional wedge lever lock
- Opening angle of door: 130°
- Galvanized and additionally painted

#### **Customer services:**

- Requirements for the installation surface
  - A soil load of at least 26 kN/m<sup>2</sup> must be demonstrated
- Floor accuracy according to DIN 18202, table 3, line 3
- Anchoring to the ground is not necessary, the BBS stands firmly on the ground by its own weight
- Connection of the earthing to existing foundation or depth earth electrodes

Model	BBS
External dimensions W x D x H (mm)	1500 x 910 x 2314
Internal dimensions W x D x H (mm)	1100 x 630 x 1600
Adjustable storage levels	4
Dimensions per storage level W x D x H (mm)	1000 x 500 x 280
Max. load per storage level (kg)	100
Weight (kg)	2850
Article no.	C62-2015-B

Accessories	Article no.
Exterior painting, white	C62-2016-B
Additional grid shelf as storage level	C62-2017-B
Fire protection cable bushing	C62-2018-B
Fire alarm incl. potential-free contact and	
external switch box	C62-2019-B
Charging device with socket strip 5-fold in	
each storage level (4 levels)	С62-2020-В
Aerosol extinguishing system	C62-2021-B

#### Mode of operation of the VDS-tested extinguishing system Aerosol LiBa®Sol:

Generally, aerosol is described as a mixture of gas with solid and/or liquid suspended particles. The release or combustion of the solid matter contained in the LiBa®Sol generators creates an aerosol of solid and gaseous particles. These spread throughout the entire cabinet in milliseconds, displacing oxygen, diluting combustible gases and starting the extinguishing process in the process!

The extinguishing process takes place by intervening in the combustion triangle. This always consists of the fuel itself, oxygen and an ignition energy (heat).

Thus, the aerosol intervenes in the chemical chain reaction of the fire process by displacing oxygen, among other things, and interrupts it.

The VDS-tested extinguishing agent LiBa<sup>®</sup>Sol is 100 % environmentally friendly, does not produce any environmentally hazardous by-products and is absolutely climate-friendly.





Safety marking according to ADR regulation

Concerning the real test of the storage cabinet guidance was made regarding standards of ADR:

- It was observed that the battery concrete cabinet has completely fufilled its protection goals

BBS.

Article no. C62-2015-B, with optional exterior painting

- Temperature on the outside of the storage cabinet has never been exceeded at any time, i.e. temperature T = 100°C
- There was no flame failure. Furthermore, there was no leakage of solid parts referring to the storage cabinet indicated by detectors

- The review of HF-measurement revealed that there was no critical hydrogen fluoride concentration (pressure release with integrated gas management) indicated by detectors

#### Charging device for rechargeable batteries Technical data:

- with CE-EU declaration of conformity
- with overvoltage protection
- socket strip 5-fold per storage level
- safety switch illuminated, two-pole on/off switchable
- automatic circuit breaker 16 A
- Sockets in 45° arrangement and spacing, also for angled plugs
- rated current: 16 A
- Length 46 cm, width 6.5 cm, height 4 cm,
- Total number of sockets: 5
- Protection class (IP): IP20
- Leakage current: 13500 A



Charging device with socket strip 5-fold

Wedge lever lock

Abbreviation	Regulation
ADR	Regulations for the transportation of dangerous goods
ADR P910	For production series of not more than 100 cells or batteries of UN Nos. 3090, 3091, 3480, 3481. Further for pre-production prototypes of cells or batteries of these UN Nos. and these prototypes are carried for testing.
ADR P911	Applies to damaged or defective cells and batteries of UN Nos. 3090, 3091, 3480 and 3481 which are prone to rapid disassembly, dangerous reaction, flame formation, dangerous evolution of heat or dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of carriage.
ADR P 908	Applies to damaged or defective lithium-ion cells and batteries, as well as damaged or defective lithium metal cells and batteries of UN Nos. 3090, 3091, 3480, 3481, even if contained in equipment.
ADR Special regulation 376	Lithium-ion cells or batteries and lithium metal cells or batteries found to be damaged or defective to the extent that they no longer conform to the type tested in accordance with the applicable provisions of the Manual of Tests and Criteria shall comply with the provisions of this special provision.
ADR Special regulation 377	Lithium-ion cells or batteries and lithium metal cells or batteries and equipment containing such cells and batteries being carried for disposal or recycling and packed with or without other batteries that are not lithium batteries may be packed in accordance with packing instruction P909 of 4.1.4.1.

IMPORTANT REGULATIONS

#### LIBA®BARREL

#### Collecting, storing and transporting with the LiBa®Barrel

The LiBa®Barrel is a safe solution for collecting, storing and transporting of defective lithium-ion batteries in accordance with SV 377 ADR.

The barrels are available with a capacity of 6 l, 30 l, 50 l and 212 l and can be closed

by using of a clamping ring and a safety catch.

The lid is equipped with a LiBa®Vent pressure relief.



Article no.	Weight (kg)	Diameter (mm)	iter) Height (mm)	Version (L
С62-2072-В	1,95	230	180	6
C62-2073-B	3,30	328	396	30
C62-2074-B	4,75	375	515	50
С62-2075-В	25,50	605	874	212



LiBa®Barrel, 50 liter, Article no. C62-2074-B

#### LIBA®PAC FOR LITHIUM-ION BATTERIES UP TO 40 KG

With the LiBa®Pac we offer, in combination with the LiBa®Bag, a two-stage packaging for lithium-ion batteries up to 40 kg according to SV 376 and SV 377 ADR. As well as for the shipment of prototypes according to ADR.

The reusable box meets the highest protection requirements in accordance with packing group I (X coding) and prevents the expansion of fire, even in the case of batteries that have reacted.





Size	External dim. L x B x H (mm)	Internal dim. L x B x H (mm)	Gross weight (kg)	Maximum load (kg)	Article no.
S	380 x 290 x 210	340 x 250 x 160	17,0	6,0	С62-2076-В
L	485 x 230 x 210	430 x 185 x 160	20,3	9,3	С62-2077-В
Х	500 x 250 x 200	480 x 230 x 170	52,0	40,0	C62-2078-B

#### TRANSPORT BOX K 470 - AKKU SAFE

- For the safe storage and transport of prototypes (ADR P910), defective or damaged lithium-ion batteries in accordance with ADR SV 376 and packing instruction P908.
- Determination also available for critically defective batteries according to P911.
- High-quality special container made of aluminium with 3 compartments each 430 x 120 x 120 mm.
- With fireproof padding and absorbent material made of textured glass fibres.
- Tested and approved as dangerous goods packaging in accordance with ٠ UN regulations, i.e. public transport possible in accordance with regulations.
- Approval for the transport of critically defective lithium-ion batteries according to P911, SV 376.
- Fire test (with 814 Wh) passed.

Transport box K 470 - Akku Safe,

Article no. C62-2070-B

Model	External dim. L x B x H (mm)	Internal dim. L x B x H (mm)	Weight (kg)	Article no.
Transport box K 470 - Akku Safe	600 x approx. 600 x approx. 250	550 x 550 x 220	11,5	С62-2070-В

#### TRANSPORT BOX K 470 - AKKU SAFE UNIVERSAL

#### Approved dangerous goods packaging for lithium-ion batteries UN 3480, UN 3481, UN 3090, UN 3091

- Suitable for the transport of prototype, defective or damaged lithium-ion batteries, critically defective (acc. to SV 376 and P911 ADR) and batteries for disposal and recycling.
- High dielectric strength, i.e. also suitable for high-power batteries such as Power Tool batteries.
- Padding and absorbent material non-flammable, non-electrically conductive and dust-free.
- Fire test (with 1,300 Wh) passed.





Transport box K 470 - Akku Safe Universal, Article no. C62-2071-B

Model	External dim. L x B x H (mm)	Internal dim. L x B x H (mm)	Weight (kg)	Article no.
Transport box K 470 - Akku Safe Universal	600 x approx. 400 x approx. 250	550 x 350 x 220	11,5	C62-2071-B

#### THE ALL-IN-ONE SOLUTION - LIBA®BOX

The LiBa®Box is suitable for the storage and transport of lithium-ion batteries. It is equipped with a collecting tray, fireproof inner packaging, fire detection and an extinguishing system. This can extinguish a fire and at the same time handle the exhaust gas treatment of the bursting batteries. With this concept, you get a safe complete solution..





Article no. C62-2082-B

Size	Dimensions (mm)	Weight (kg)	Article no.
XS	900 x 650 x 553	90	С62-2080-В
Μ	1200 x 800 x 990	176	C62-2081-B
XL	1200 x 1200 x 1800	350	C62-2082-B
XLs	2000 x 1400 x 990	430	C62-2083-B



#### **PRACTICAL INFORMATION 11**

#### What should be considered when storing pressurized gas cylinders!

Pressurized gas cylinders belong to the things in stock which are subject to strict restrictions due to their tremendous hazard potential. The most important regulations are regulated by TRGS 510. We already have compiled some important extracts from the TRGS 510 below.

#### 4.2 Storage locations and rooms:

- (4) Generally hazardous substances may not be stored in places where this could mean a risk to workers or other persons.
  - 1. Such places are, in particular, traffic routes. Traffic routes include, among others, stairs, corridors, escape and escape routes, passageways, driveways and narrow courtyards.
  - 2. Places which are not suitable for the storage are lunch rooms, ready rooms, sanitary rooms, emergency rooms or daytime accommodation.
  - 3. Hazardous substances may only be stored in workrooms if the storage is compatible with the protection of workers and if it is carried out in special facilities which correspond to the state of the art.

#### 10.1 Field application:

(1) The regulations are to be observed when storing gases which are labeled with H220, H221, H270, H280 or H281 according to CLP-VO and which are stored in quantities of more than 2.5 l.

#### 10.2 Organizational measures:

- (1) Compressed gas cylinders have to be secured against falling or falling down. The valves have to be protected by a suitable protective device.
- (2) Gases are not to be transferred in the store, furthermore no maintenance work on compressed gas cylinders are to be carried out.
- (3) Acute toxic gases must be kept under lock and key or they have to be stored in such manner that only qualified and reliable persons have access.
- (4) Gases marked with H330 may only be stored in rooms if they have a gas warning device which alerts acoustically and optically when the permissible operating limit values are exceeded.

#### 10.3 Constructional requirements and fire protection:

- (1) For storage in stockrooms
  - 1. rooms have to be seperated from adjoining rooms by at least fire-resisting components (F 30),
  - 2. components have to be fire-resistant, if there is any danger of explosion or fire hazard in adjoining rooms not intendes for the storage of pressurized gas cylinders,
  - 3. external walls of stockrooms have to be at least fire-retardant. If the safety distance to adjacent plants and installations which incurs danger is at least 5 meters the external wall may consist of non-combustible material.
- (2) Stockrooms outdoors have to keep a safety distance of at least 5 meters to adjacent plants and installations which incurs danger.
- (3) Compressed gas cylinders may only be stored in suitable safety cabinets with a fire-resistance of at least 30 minutes. Acutely toxic gases may only be stored in safety cabinets with an air exchange of 120-fold per hour. Oxidizing or flammable gases may only be stored in technical ventilated safety cabinets with a 10-fold air exchange per hour.
- (4) A maximum of 50 filled compressed gas containers may be stored in rooms below ground level, if
  - 1. a technical forced ventilation with a 2-fold air exchange per hour is ensured,
  - 2. for natural ventilation the ventilation openings have to have at least a total cross-section of 10% of the floor area of the room, an aeration is given and the floor is not more than 1.5 m below the ground level or
  - 3. they are stored in safety cabinets meeting the requirements of DIN EN 14470-2.
- (5) Rooms in which compressed gas containers are stored have to be vented appropriately. A natural ventilation is sufficient if the venting slots with a total cross-section of at least 1/100 of the floor area of the stockroom are leading directly into the open area.

#### 10.4 Special protective measures:

 In the case of acute toxic or flammable gases, protective areas around pressurized gas cylinders are to be installed. These areas must be taken into account in the hazard assessment, for example explosion protection measures may be necessary.



Storage in rooms



#### CONTENTS GAS CYLINDER STORAGE SYSTEMS

6. Gas cylinder storage systems outdoors...



Our gas cylinder storage systems are available in our standard color RAL 5015 - sky blue (if not specified separately)





Safety cabinets for small gas cylinders page 194-195



TRG cells page 196-197



Cages and containers for gas cylinders page 198-199



Storage system for gas cylinders F 90 steel page 200



Gas cylinder storage system concrete page 201



Gas cylinder handling / Pallets for gas cylinders page 202-203



#### SAFETY CABINETS FOR SMALL GAS CYLINDERS K-GFS

#### For storing propane gas cylinders outdoors

#### **Technical description:**

- Constructed completely from galvanized sheet steel
- Ventilation by means of venting slots above and below the door(s)
- Door(s) with cylinder lock to prevent unauthorized access
- Marked with warning symbol as per ASR A1.3



K-GFS 11, Article no. C27-3213-B





K-GFS 13, Article no. C27-3215-B



K-GFS 14, Article no. C27-3216-B



K-GFS 21, Article no. C27-3217-B



K-GFS 22, Article no. C27-3218-B

Model	K-GFS 11	K-GFS 12	K-GFS 13	K-GFS 14	K-GFS 21	K-GFS 22
External dimensions W x D x H (mm)	460 x 400 x 750	860 x 400 x 750	460 x 400 x 1435	860 x 400 x 1435	1320 x 400 x 1435	1720 x 400 x 1435
Capacity, gas bottles	1 x 11 kg	2 x 11 kg	1 x 33 kg	2 x 33 kg	3 x 33 kg	4 x 33 kg
Number of doors	1	1	1	1	2	2
Weight (kg)	17	22	26	39	65	78
Article no., galvanized	C27-3213-B	C27-3214-B	C27-3215-B	C27-3216-B	С27-3217-В	C27-3218-B



#### SAFETY CABINETS FOR SMALL GAS CYLINDERS K-GFS

#### For storing propane gas cylinders outdoors

#### **Technical description:**

- Constructed completely from galvanized sheet steel
- Closed back wall and roof
- Side walls and door(s) with pattern of holes for stipulated ventilation as per TRGS 510
- Stable floor and intermediate shelf as storage areas
- Door(s) with cylinder lock to prevent unauthorized access
- Marked with warning symbol as per ASR A1.3
- Dismounted delivery for self-assembly according to supplied instructions



K-GFS 10, Article no. C27-3210-B



K-GFS 20, Article no. C27-3211-B



K-GFS 10, Article no. C27-3210-B



Article no. C27-3211-B



K-GFS 20, Article no. C27-3211-B, with optional cylinder holder

Model	K-GFS 10	K-GFS 20
External dimensions W x D x H (mm)	860 x 720 x 1435	1710 x 720 x 1435
Capacity, 11 kg gas bottles	10	20
Capacity, 33 kg gas bottles	4	9
Door(s)	1 DIN right	double door
Weight (kg)	60	105
Article no., galvanized	С27-3210-В	С27-3211-В
Accessory	Article no.	Article no.
Cylinder holder for 2 gas cylinder	С27-3212-В	С27-3212-В



#### TRG 700 / TRG 1050 / TRG 1400

### For the storage of pressurized gas cylinders as per TRGS 510 indoors and outdoors

- Outer body made from galvanized sheet steel, powder-coated in RAL 7035 - light grey
- Door(s) completely made from sheet steel or sheet steel door with plexi glass cutout
- High corrosion protection
- Can also be used indoors depending on defined fire load see TRGS 510, DGUV and TRGS 526
- Storage and operation even without compliance of protection zones as per TRGS 510
- Roof inclined towards front
- Stainless steel floor to prevent impact damage
- Ventilation by means of ventilation slots in the door(s) and below the roof
- Cabinet roof prepared for on-site technical forced ventilation system (DN 80)
- Door(s) with cylinder lock
- Marked with warning symbol as per ASR A1.3

#### • Fully equipped TRG cells:

- 2 x vertical c-rails on back wall
- 2 x height- adjustable, horizontal c-rails for mounting fittings
- 1 x cylinder holder (tension belt) for 50 liters gas cylinders
- Outlets in roof for pipe penetration (ø 25 mm) including filler plug



TRG 1050, Article no. C27-3302-B



store LAB

TRG 700, Article no. C27-3300-B



TRG 1400, Article no. C27-3301-B



#### TRG 700 / TRG 1050 / TRG 1400

For storage of pressurized gas cylinders in accordance with TRGS 510 indoors and outdoors





TRG 700, Article no. C27-3306-B



TRG 1050, Article no. C27-3302-B, with two optional side-mounted shelves, Article no. C27-3309-B



TRG 1400, Article no. C27-3301-B, with two optional side-mounted shelves, Article no. C27-3309-B





TRG 1050, Article no. C27-3302-B, with optional suspended shelf, Article no. C27-3304-B

Gas cells (G 30) can be found on page 141!



Top view of the roof with prepared pipe penetrations and exhaust air connection

Model	TRG 700	TRG 1050	TRG 1400
External dimensions W x D x H (mm)	700 x 400 x 2050	1050 x 400 x 2050	1400 x 400 x 2050
Door/s	1 DIN right	double door	double door
Pipe penetrations	5	8	10
Capacity 50 liter gas cylinders	up to 2	up to 3	up to 4
Weight (kg)	65	90	120
Outer body: RAL 7035 - light grey			
Article no., door/s sheet steel			
RAL 7035 - light grey	С27-3300-В	С27-3302-В	C27-3301-B
Article no., door/s sheet steel			
RAL 7035 - light grey with plexiglass segment	С27-3306-В	С27-3307-В	С27-3308-В
Accessories	Article no.	Article no.	Article no.
Suspended shelf*	С27-3303-В	C27-3304-B	С27-3305-В
Side-mounted shelf	С27-3309-В	С27-3309-В	С27-3309-В

\*) regarding entire width of particular gas cylinder safety cabinet, made from powder-coated sheet steel in RAL 7035 - light grey

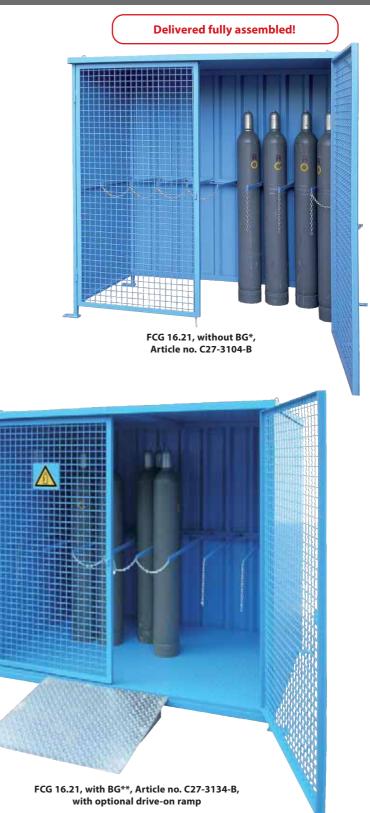


#### CAGES FOR GAS CYLINDERS

Gas cylinders are included in the group of goods that are subject to strict storage regulations because of their great potential risks. Therefore gas cylinders must not be stored in basements, garages or work spaces. This means that gas cylinder cabinets and containers are intended for outdoor use and comply with the requirements of TRGS 510 for an outdoor storage facility.

- Welded profile steel construction
- Side walls and roof made from galvanized and painted sheet steel
- Back wall made from galvanized and coated trapezoidal sheet
- Grid-type door(s)
- Cantilever arm compartment divider with safety chains (folding)
- Lifting attachment for cranes as standard
- Single or double door depending on version





Gas cylinder safety cages	for individual cylind	ers
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FCG 6.08, without BG\*, Article no. C27-3101-B

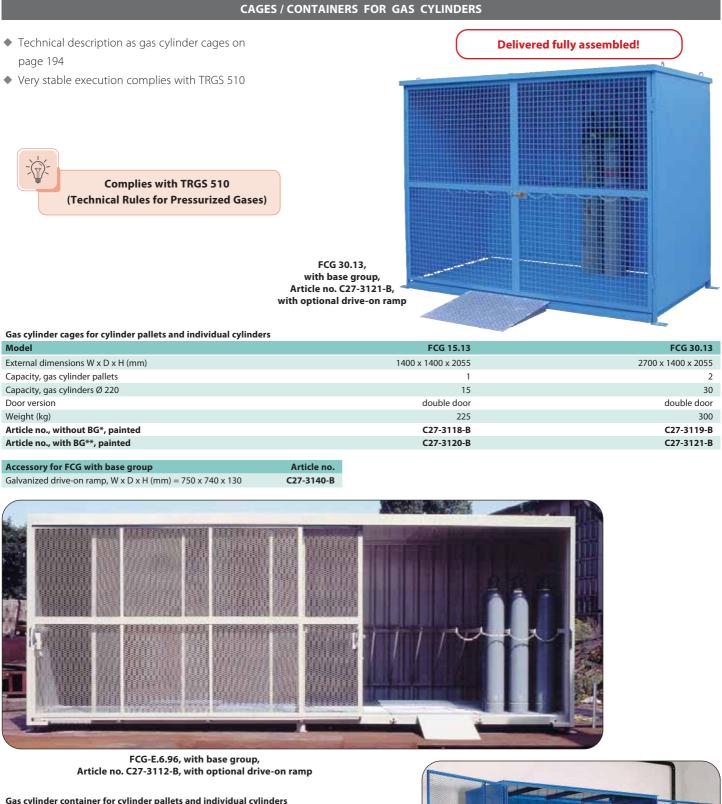
dus cynniaer sarety euges for marria	au cynnaers					
Model	FCG 6.08	FCG 8.11	FCG 12.11	FCG 16.21	FCG 24.21	FCG 32.21
External dimensions W x D x H (mm)	860 x 1050 x 2055	1125 x 1050 x 2055	1125 x 1250 x 2055	2100 x 1050 x 2055	2100 x 1250 x 2055	2100 x 1480 x 2055
Capacity, gas cylinders Ø 220	6	8	12	16	24	32
Door version	1 DIN right	1 DIN right	1 DIN right	double door	double door	double door
Weight (kg)	155	170	180	235	245	280
Article no., without BG*, painted	C27-3101-B	C27-3102-B	C27-3103-B	C27-3104-B	C27-3105-B	C27-3106-B
Article no., with BG**, painted	C27-3131-B	C27-3132-B	C27-3133-B	C27-3134-B	C27-3135-B	C27-3136-B

Accessory for FCG with base group	Article no.
Galvanized drive-on ramp, W x D x H (mm) = 750 x 740 x 130	C27-3140-B

\* = without base group \*\* = with base group



#### **CAGES / CONTAINERS FOR GAS CYLINDERS**



Gas cylinder container for cylinder pallets and individual cylinders				
Model	FCG-E.3.48	FCG-E.6.96		
External dimensions W x D x H (mm)	3120 x 1440 x 2400	6220 x 1440 x 2400		
Capacity, gas cylinder pallets	2 and 4 gas cylinder	4 and 8 gas cylinder		
Capacity, gas cylinders Ø 220	48	96		
Door version	double door	sliding door, two-piece		
Weight (kg)	760	1500		
Article no., without BG*, painted	C27-3111-B	C27-3113-B		
Article no., with BG**, painted	С27-3110-В	C27-3112-B		

\* = without base group \*\* = with base group

Accessory for FCG with base group	Article no.
Galvanized drive-on ramp, W x D x H (mm) = 880 x 845 x 205	C27-3141-B



FCG-E.3.48, with base group, Article no. C27-3110-B

#### GAS CYLINDER STORAGE SYSTEM STEEL



**Delivered fully assembled!** 

#### ROOF, SIDEWALLS AND BACK WALLS IN F90 VERSION

- For regular storage outdoors of pressurized gas cylinders in accordance with TRGS 510
- Roof and walls in fire-resistant version as per DIN 4102
- Cantilever arm compartment divider with safety chains (fold out)
- Mounted delivery
- Lockable grilled door
- With hinged or double-hinged door depending on version



Installation directly next to building without safety distance!

GFL-F90-6.08, Article no. C66-2010-A



GFL-F90-24.21, Article no. C66-2014-A, with optional partition wall



GFL-F90 with closed door (available for all types, price on request)



GFL-F90 in special design

GFL-F90-6.08	GFL-F90-8.11	GFL-F90-12.11	GFL-F90-16.21	GFL-F90-24.21	GFL-F90-32.21
112012702210					
1120 x 1270 x 2310	1370 x 1270 x 2310	1370 x 1420 x 2310	2390 x 1270 x 2310	2390 x 1420 x 2310	2390 x 1620 x 2310
800 x 920 x 2000	1050 x 920 x 2000	1050 x 1080 x 2000	2050 x 920 x 2000	2050 x 1080 x 2000	2050 x 1230 x 2000
Hinged door	Hinged door	Hinged door	Double-hinged door	Double-hinged door	Double-hinged door
DIN right	DIN right	DIN right			
6	8	12	16	24	32
C66-2000-A	C66-2001-A	C66-2002-A	C66-2003-A	C66-2004-A	C66-2005-A
C66-2010-A	C66-2011-A	C66-2012-A	C66-2013-A	C66-2014-A	C66-2015-A
		Article no.			
		C66-2020-A			
8/-8.11/-16.21		C66-2021-A			
	Hinged door DIN right 6 C66-2000-A	Hinged door DIN right DIN right 6 8 C66-2000-A C66-2001-A	Hinged door DIN rightHinged door DIN rightHinged door DIN right6812C66-2000-AC66-2001-AC66-2002-AC66-2010-AC66-2011-AC66-2012-A	Hinged door DIN rightHinged door DIN rightDouble-hinged door Double-hinged door681216C66-2000-AC66-2001-AC66-2002-AC66-2003-AC66-2010-AC66-2011-AC66-2012-AC66-2013-A	Hinged door DIN rightHinged door DIN rightDouble-hinged door Double-hinged doorDouble-hinged door68121624C66-2000-AC66-2001-AC66-2002-AC66-2003-AC66-2004-AC66-2010-AC66-2011-AC66-2012-AC66-2013-AC66-2014-A

C66-2023-A

Partition wall depth 1230 mm: GFL-F90-32.21



#### GAS CYLINDER STORAGE SYSTEM CONCRETE

The storage of pressurized gas cylinders is regulated by Technical Regulations for Pressurized Gases (TRGS 510). That is to say: Gas cylinders have to be placed on even ground and be secured against tilting. E.g. stored in gas cylinder pallets, positioned with security chain.

- Whole construction made from reinforced concrete strength class C 30/37
- Walls F30 fire resistant according to DIN 4102
- Integrated weather-protecting canopy roof
- Exterior surface with spray plaster, interior surface painted
- Including roof coating and drainage
- Lockable, grid-type double doors galvanized
- Retaining bracket with safety chain as additional separation
- Turn-key mounted delivery

Flexible storing of single gas cylinders and/or gas cylinder pallets by movable cantilevers is possible.



GFL-B-50.28, Article no. C62-4020-A



Model	GFL-B-50.28
External dimensions W x D x H (mm)	2980 x 1700 x 2560
Internal dimensions W x D x H (mm)	2820 x 1600 x 2172
Capacity 50 liter gas cylinders	50 cylinders
Gas cylinder pallet	or 1 pallet and 20 cylinders
	or 2 pallets
Article no.	C62-4020-A
Accessory	Article no.
Drive-on ramp galvanized W x D (mm) = $950 \times 1150$	C62-4021-A



be found on page 203!



GFL-B-50.28, Article no. C62-4020-A, with optional drive-on ramp

#### **GAS CYLINDER HANDLING**

#### GAS CYLINDER ROLLER

- For safe transport of steel cylinders
- Welded steel frame construction powder-coated RAL 5012
- Cylinder holder with securing chain
- Safety handle according to applicable safety regulations
- Wheels mounted on roller bearings
- ◆ GFR27-V suitable for propane gas bottles (Platform  $L \times W = 350 \times 350$  mm)



Model	GFR40-V	GFR40-L	GFR10-V	GFR27-V
Bottle content (l)	40	40	10	27 / 50
Gas cylinders Ø (mm)	140 - 250	140 - 250	140	320
Dimensions W x H (mm)	485 x 1140	485 x 1140	470 x 1050	505 x 955
Wheels	solid rubber tires	pneumatic tires	solid rubber tires	solid rubber tires
Wheel Ø (mm)	200	200	200	200
Article no.	B69-6430-A	B69-6431-A	B69-6432-A	B69-6433-A

#### GAS CYLINDER CART

- For safe transport of steel cylinders
- Welded steel frame construction powder-coated RAL 5012

GFW50-VO

40 / 50

380

210 - 250

730 x 1345

B69-6434-A

- Cylinder holder for 2 gas bottles with securing chain
- Safety handle according to applicable safety regulations
- ٠ Wheels mounted on roller bearings, solid rubbers tires
- With practical tool box

Model

Bottle content (l)

Wheel Ø (mm)

Article no.

Gas cylinders Ø (mm)

Dimensions W x H (mm)

GSW50-VS with support wheel (Ø 200 mm)

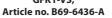
3012		
ons		
S		
GFW50-VS		
40 / 50		
210 - 250		GFW50-VS,
735 x 1345		Article no.
380	GFW50-VO,	B69-6435-A
B69-6435-A	Article no. B69-6434-A	

#### GAS CYLINDER BARROW

- For safe transport of steel cylinders
- Welded steel frame construction powder-coated RAL 5012
- Cylinder holder for 1 or 2 gas bottles with securing chain ٠
- Safety handle according to applicable safety regulations
- Wheels mounted on roller bearings, solid rubber tires ٠
- With support wheel (Ø 160 mm) ٠
- ◆ GFK1-VS with tilt adjustment through spring lock

Model	GFK1-VS	GFK2-VS
Number of gas cylinders	1	2
Gas cylinders Ø (mm)	286	230 / 380
Load (kg)	150	200
Dimensions W x H (mm)	500 x 1190	915 x 1310
Wheel Ø x height (mm)	250 x 60	380 x 80
Article no.	B69-6436-A	B69-6437-A





GFK2-VS,



#### For the storage and transport of propane gas cylinders

- Solid frame construction, fire galvanized
- Accessible by foot construction with fork-lift truck or hand pallet truck
- Capacity: 12 pieces gas cylinders, 11 kg or 20 pieces gas cylinders 5 kg
- Dimensions: W x D x H (mm) = 1230 x 1015 x 975
- ♦ Weight: 61 kg



#### GAS CYLINDER PALLET GFP-1233

#### For the storage and transport of 33 kg gas cylinders

- Solid frame construction, fire galvanized
- Accessible by foot construction with fork-lift truck or hand pallet truck
- Capacity: 12 pieces gas cylinders 33 kg
- Dimensions W x D x H (mm) = 1400 x 1060 x 1710
- Weight: 110 kg



#### GAS CYLINDER PALLET GFP-2411

#### For the storage and transport of propane gas cylinders

- Solid frame construction, fire galvanized
- Grid-sidewalls
- Roof from galvanized trapezoidal sheet
- Grilled double-hinged door lockable with padlock
- 2 storage levels
- Accessible by foot construction with fork-lift truck or hand pallet truck
- Capacity: 24 pieces gas cylinders 11 kg or 40 pieces gas cylinders 5 kg
- Dimensions: W x D x H (mm) = 1245 x 1015 x 1760
- Weight: 120 kg





Article no. B69-6411-A

#### GAS CYLINDER PALLET GFP-1250

#### For the storage and transport of 50 kg gas cylinders

- Solid frame construction, fire galvanized
- Accessible by foot construction with fork-lift truck or hand pallet truck
- Integrated hinged ramp
- Capacity: 12 pieces gas cylinders 50 kg
- Dimensions: W x D x H (mm) = 1015 x 810 x 1150
- ♦ Weight: 90 kg





Tension belt for all types, available as accessory, length 3 m, Article no. Z50-1921-A

Article no. B69-6413-A

#### **PRACTICAL INFORMATION 12**

The question which hazardous substances are allowed to be stored together in stores as well as bearing sections, is very important for the design of storage places referring to hazardous substances. It is specified in numbers of regulations, laws and technical.

Basically, the following essential requirements have to be met when clustering hazardous substances:

- Hazardous substances may only be stored together if this does not result in a risk increase
- Substances of the same LGK or substances of different LGKs for which separate storage is not required may not be combined as well if this can lead to a substantial risk increase. This is given when the substances, e.g.
  - 1. require different extinguishing agents,
  - 2. require different temperature conditions,
  - 3. react with the formation of flammable or toxic gases or
  - 4. react with formation of a fire.
- Separated storage is provided when different materials are separated from one another in the same storage section by a sufficient distance or by barriers (e.g. by means of walls, cabinets made from non-combustible material, products of non-combustible substances of LGK 12 or 13) or by storage in separate collecting rooms.
- Separate storage is provided when substances are stored in different storage sections with a fire resistance duration or capability of at least 90 minutes.

As you can see below you will be able to define quickly and clearly the permissibility of clustering concerning the different substances by means of a simplified list. Please have a look at the TRGS 510 for further information on "constrained clustering".

#### **Overviews of clustering dependent on storage class**

Storage class		10-13	13	12	11	10	8B	8A	7	6.2	6.1D	6.1C	6.1B	6.1A	5.2	5.1C	5.1B	5.1A	4.3	4.2	4.1B	4.1A	3	2B	2A	1
Explosive substances	1																									
Gases	2A																									
Aerosols	2B																									
Flammable liquid substances	3																									
Other explosive substances	4.1A																							1		
Flammable solid or desensitized substances	4.1B																									
Self-igniting substances	4.2																									
Substances which form flammable gases in contact with water	4.3																				-					
Intensive oxidizing substances	5.1A																									
Oxidizing substances	5.1B																									
Ammonium nitrate and ammonium nitrate containing substances	5.1C																	-								
Organic peroxides and self-reactive substances	5.2																-									
Combustible acute toxic substances	6.1A																									
Incombustible acute toxic substances	6.1B														-											
Combustible toxic or chronic active substances	6.1C													,												
Incombustible toxic or chronic active substances	6.1D																									
Infectious substances	6.2																									
Radioactive substances	7													Sepa	arate	stora	ge re	quire	d							
Combustible caustic substances	8A																									
Incombustible caustic substances	8B								,					Clus	terin	a per	mitte	d								
Combustible liquids unless LGK 3	10															51-51		-								
Combustible solids	11						-							Cor	ctroin	ممط حا	uster	ina -	ormi	tod						
Incombustible liquids	12					_								Con	sual	ieu Cl	uster	ng p	ennit	liea						
Incombustible solids	13				_																					
Other combustible and incombustible substances	10-13																									

The concept is based on assigning respective substances to so called storage classes (LGK) apparent from related safety data sheet or is to be determined as per TRGS 510, annex 2. In the overview for each LKG a statement is given, whether clustering with each of the remaining LKG is permitted generally, a prohibition of clustering exists (seperate storage is requested!) or a restriction is to be observed (e.g. seperate storage is requested when storing in the same storage section).

#### Α

n	
Acid and alkali cabinets	
Acid-resistant PE-insert	
Active storage	
Akku Safe	
Akku Safe Universal	
Airbag cabinet	
Attachment adapter	
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#### В

#### с

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Cabinets for acid and alkalis	
Cabinets for airbags	
Cabinets for chemicals and poisons	
Cabinets for hazardous substances	
Cabinets for pesticides	
Cabinets for pressurized gas cylinders	
Cabinets for small gas cylinders outdoors	
Cabinets PE	
Cages for gas cylinders	
Can support	
Carts	
Cells for gas cylinders	
Checklist	
Chemicals and poisons cabinet	
Collision protection	
Collision protection corner	
Combi cabinets	
Compact sump pallets	
Compartment for documents	
Containers for gas cylinders	
Convection heating	
Corridor lining	
Corridor roof	
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Cover plate	
Cross connectors	

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Drum cabinets type 90	
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F90 container	
F90 gas cylinder storage system steel	
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Fume cupboard underbench cabinets	

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