

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 1 of 12

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

SL450

UFI: HRWA-XF03-N2FX-M9MX

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Paints and varnishes

1.3. Details of the supplier of the safety data sheet

Company name: Hottinger Brüel & Kjaer
Street: Im Tiefen See 45
Place: D-64293 Darmstadt
Telephone: +49 (0)6151 803-0
Internet: www.hbm.com
Responsible Department: support@hbm.com

1.4. Emergency telephone number: +49-30-18412-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 2; H225
Acute Tox. 4; H332
Skin Irrit. 2; H315
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

xylene
ethylbenzene

Signal word: Danger

Pictograms:



Hazard statements

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P233 Keep container tightly closed.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 2 of 12

Special labelling of certain mixtures

EUH208 Contains zinc bis(diethyldithiocarbamate). May produce an allergic reaction.
Restricted to professional users.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H412

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
1330-20-7	xylene			50 - < 55 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
100-41-4	ethylbenzene			10 - < 15 %
	202-849-4	601-023-00-4		
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304			
14324-55-1	zinc bis(diethyldithiocarbamate)			< 1 %
	238-270-9	006-082-00-4		
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H302 H315 H319 H317 H335 H400 H410			
108-88-3	toluene			< 1 %
	203-625-9	601-021-00-3		
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
1330-20-7	215-535-7	xylene	50 - < 55 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg		
100-41-4	202-849-4	ethylbenzene	10 - < 15 %
	inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg		
14324-55-1	238-270-9	zinc bis(diethyldithiocarbamate)	< 1 %
	oral: ATE = 500 mg/kg		
108-88-3	203-625-9	toluene	< 1 %
	inhalation: LC50 = 49 mg/l (vapours); dermal: LD50 = 12200 mg/kg		

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 3 of 12

Further Information

No information available.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down. If unconscious but breathing normally, place in recovery position and seek medical advice. First aider: Pay attention to self-protection!

After inhalation

When in doubt or if symptoms are observed, get medical advice.
Provide fresh air.
In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Dry extinguishing powder, Foam

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Highly flammable.
Vapours can form explosive mixtures with air.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.
Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Use personal protection equipment.

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 4 of 12

Do not allow to enter into surface water or drains. Treat the recovered material as prescribed in the section on waste disposal. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically, placing in appropriate containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Further information on handling

Wear personal protection equipment (refer to section 8). Do not empty into drains. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and in a well-ventilated place.
Do not allow to enter into surface water or drains.
Do not allow uncontrolled discharge of product into the environment.

Hints on joint storage

Do not store together with: Oxidising agent, strong , Combustible substances of acute toxicity, category 1 and 2 / very toxic substances Non-combustible substances of acute toxicity, category 1 and 2 / very toxic substances

Further information on storage conditions

Keep container tightly closed in a cool, well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 5 of 12

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

Additional advice on limit values

No information available.

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.
In use, may form flammable/explosive vapour-air mixture.
Use explosion-proof electrical equipment.
Use non-sparking tools.

Protective and hygiene measures

When using do not eat or drink.
Do not breathe gas/fumes/vapour/spray.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
Wear suitable protective clothing, gloves and eye/face protection.
Draw up and observe skin protection programme.

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. EN ISO 374
The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Thickness of the glove material: $\geq 0,7$ mm
Suitable gloves type NBR (Nitrile rubber)
Breakthrough time: ≥ 480 min
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Used working clothes should not be worn outside the work area.
Separate storage of work clothes.
Wear anti-static footwear and clothing

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device (full mask or mouthpiece) with filter: a

Environmental exposure controls

Do not allow to enter into surface water or drains.
The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 6 of 12

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	colourless	
Odour:	Solvents	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		136 °C
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
not determined:		
Flash point:		15 °C
Sustaining combustion:		No data available

Flammability

Solid/liquid:		not determined
Gas:		not determined

Explosive properties

not explosive according to EU A.14

Lower explosion limits:		0,7 vol. %
Upper explosion limits:		8,1 vol. %
Auto-ignition temperature:		430 °C

Self-ignition temperature

Solid:		not determined
Gas:		not determined
Decomposition temperature:		not determined

Oxidizing properties

No information available.

Vapour pressure: (at 20 °C)		10 hPa
Vapour pressure: (at 50 °C)		47 hPa
Density (at 20 °C):		1,01 g/cm ³
Bulk density:		not determined
Water solubility:		not determined

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:		not determined
Viscosity / dynamic:		not determined
Viscosity / kinematic:		not determined
Flow time:		not determined
Relative vapour density:		not determined
Evaporation rate:		not determined

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 7 of 12

Solvent separation test:	not determined
Solvent content:	70,25 %

9.2. Other information

Solid content:	0,99 %
----------------	--------

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

Further information

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (dermal) 2820,5 mg/kg; ATE (inhalation vapour) 23,57 mg/l; ATE (inhalation dust/mist) 2,941 mg/l

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 8 of 12

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1330-20-7	xylene				
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
100-41-4	ethylbenzene				
	oral	LD50 3500 mg/kg	Rat	GESTIS	
	dermal	LD50 15400 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 17,2 mg/l	Rat		
	inhalation dust/mist	ATE 1,5 mg/l			
14324-55-1	zinc bis(diethyldithiocarbamate)				
	oral	ATE 500 mg/kg			
108-88-3	toluene				
	dermal	LD50 12200 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 49 mg/l	Rat	GESTIS	

Irritation and corrosivity

Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Contains zinc bis(diethyldithiocarbamate). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (ethylbenzene)

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No information available.

Additional information on tests

No information available.

Practical experience

No information available.

11.2. Information on other hazards

Other information

No information available.

Further information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 9 of 12

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
100-41-4	ethylbenzene					
	Acute algae toxicity	ErC50	3,6 mg/l	96 h	GESTIS	
108-88-3	toluene					
	Acute fish toxicity	LC50	13 mg/l	96 h	Carassius auratus	IUCLID
	Acute algae toxicity	ErC50	12,5 mg/l	72 h	GESTIS	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
100-41-4	ethylbenzene	3,15
108-88-3	toluene	2,73

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

No information available.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1993
14.2. UN proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Ethylbenzol, Xylol)
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Classification code:	F1
Special Provisions:	274 601
Limited quantity:	5 L

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 10 of 12

Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Ethylbenzol, Xylol)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Special Provisions: 274 601
Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Ethylbenzene, Xylene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Special Provisions: 223, 274, 955
Limited quantity: 5 L
Excepted quantity: E1
EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1993
14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Ethylbenzene, Xylene)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Special Provisions: A3
Limited quantity Passenger: 10 L
Passenger LQ: Y344
Excepted quantity: E1
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 11 of 12

IATA-max. quantity - Cargo:

220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 48, Entry 75

2010/75/EU (VOC): 70,19 % (708,919 g/l)

2004/42/EC (VOC): 70,19 % (708,919 g/l)

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 11.

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet

according to UK REACH Regulation



SL450

Revision date: 14.09.2022

Page 12 of 12

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains zinc bis(diethyldithiocarbamate). May produce an allergic reaction.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)