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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revised on / Version: 28.10.2013 / 0021
Replaces revision of / Version: 02.08.2012 / 0020
Valid from: 28.10.2013
PDF print date: 28.10.2013
Unterboden-Schutz schwarz 500 ML Art.: 6113

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

Unterboden-Schutz schwarz 500 ML
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1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:

Corrosion protection
Sector of use [SU]:
SU 3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
SU21 - Consumer uses: Private households (=general public = consumers)
SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Chemical product category [PC]:
PC 9a - Coatings and paints, thinners, paint removers
PC14 - Metal surface treatment products, including galvanic and electroplating products
PC24 - Lubricants, greases, release products
Process category [PROC]:
PROC 7 - Industrial spraying
PROC 8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC 8b - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC 9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC11 - Non industrial spraying
Article Categories [AC]:
AC99 - Not required.
Environmental Release Category [ERC]:
ERC 4 - Industrial use of processing aids in processes and products, not becoming part of articles
ERC 7 - Industrial use of substances in closed systems
ERC 8a - Wide dispersive indoor use of processing aids in open systems
ERC 8d - Wide dispersive outdoor use of processing aids in open systems

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr
Telephone: (+49) 0731-1420-0, Fax: (+49) 0731-1420-88

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

Tel.: (+49) 0731-1420-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
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Skin Irrit.	2	H315-Causes skin irritation.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.
Aerosol	1	H222-Extremely flammable aerosol.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aerosol	1	H229-Pressurised container: May burst if heated.

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

F+, Extremely flammable

Xi, Irritant, R38

N, Dangerous for the environment, R51-53

R67

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

Hazard statement

H315-Causes skin irritation. H336-May cause drowsiness or dizziness. H411-Toxic to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.

Prevention

P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P261-Avoid breathing vapour or spray. P273-Avoid release to the environment. P280-Wear protective gloves.

Response

P312-Call a POISON CENTER/doctor if you feel unwell.

Storage

P405-Store locked up. P410+P412-Protect from sunlight. Do no expose to temperatures exceeding 50 °C.

Disposal

P501-Dispose of contents/container to hazardous or special waste collection point.

Without adequate ventilation, formation of explosive mixtures may be possible.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

Danger of bursting (explosion) when heated

When using: development of explosive vapour/air mixture possible.

Hazardous to drinking water, on escape of even small quantities.

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Aerosol
3.1 Substance

n.a.
3.2 Mixture

Dimethyl ether	Substance for which an EU exposure limit value applies.
Registration number (REACH)	--
Index	603-019-00-8
EINECS, ELINCS, NLP	204-065-8
CAS	CAS 115-10-6
content %	20-40
Classification according to Directive 67/548/EEC	Extremely flammable, F+, R12
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Gas 1, H220

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	
Registration number (REACH)	01-2119475514-35-XXXX
Index	---
EINECS, ELINCS, NLP	921-024-6 (REACH-IT List-No.)
CAS	CAS ---
content %	10-<20
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Irritant, Xi, R38 Dangerous for the environment, N, R51 Dangerous for the environment, R53 Harmful, Xn, R65 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	927-510-4 (REACH-IT List-No.)
CAS	CAS ---
content %	10-<20
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Irritant, Xi, R38 Dangerous for the environment, N, R51 Dangerous for the environment, R53 Harmful, Xn, R65 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
Registration number (REACH)	01-2119473851-33-XXXX
Index	---
EINECS, ELINCS, NLP	920-750-0 (REACH-IT List-No.)
CAS	CAS ---
content %	1-<10
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Dangerous for the environment, N, R51 Dangerous for the environment, R53 Harmful, Xn, R65 R66 R67

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Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411
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Butanone	Substance for which an EU exposure limit value applies.
Registration number (REACH)	--
Index	606-002-00-3
EINECS, ELINCS, NLP	201-159-0
CAS	CAS 78-93-3
content %	1-5
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Irritant, Xi, R36 R66 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Ethyl acetate	
Registration number (REACH)	--
Index	607-022-00-5
EINECS, ELINCS, NLP	205-500-4
CAS	CAS 141-78-6
content %	1-<5
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Irritant, Xi, R36 R66 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

Cyclohexane	Substance for which an EU exposure limit value applies.
Registration number (REACH)	--
Index	601-017-00-1
EINECS, ELINCS, NLP	203-806-2
CAS	CAS 110-82-7
content %	1-5
Classification according to Directive 67/548/EEC	Highly flammable, F, R11 Irritant, Xi, R36 Dangerous for the environment, N, R50 Dangerous for the environment, R53 Harmful, Xn, R65 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

Hydrocarbons, C9, aromatics	
Registration number (REACH)	--
Index	---
EINECS, ELINCS, NLP	918-668-5 (REACH-IT List-No.)
CAS	(64742-95-6)
content %	1-5

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Classification according to Directive 67/548/EEC	Flammable, R10 Irritant, Xi, R37 Dangerous for the environment, N, R51 Dangerous for the environment, R53 Harmful, Xn, R65 R66 R67
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 2, H411

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.
 If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water. Seek medical help if necessary.
 Keep Data Sheet available.

Ingestion

Typically no exposure pathway.
 Call doctor immediately - have Data Sheet available.
 Do not induce vomiting.
 Danger of aspiration

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
 The following may occur:

Irritation of the respiratory tract
 Coughing
 Headaches
 Dizziness
 Effect on the central nervous system
 Unconsciousness
 Other dangerous properties cannot be ruled out.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2
 Extinction powder
 Water jet spray
 Large fire:
 Water jet spray
 Alcohol resistant foam
 Cool container at risk with water.

Unsuitable extinguishing media

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High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Hydrocarbons

Toxic pyrolysis products.

Danger of explosion by prolonged heating.

Explosive vapour/air mixture

In case of spreading near the ground, flashback to distance sources of ignition is possible.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

6.2 Environmental precautions

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Active substance:

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke.

Take precautions against electrostatic charges.

Do not use on hot surfaces.

Avoid long lasting or intensive contact with skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not store with oxidizing agents.

Observe special regulations for aerosols!

Observe special storage conditions (in Germany, e.g., in accordance with the regulations in the "Betriebssicherheitsverordnung").

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

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Do not keep the container sealed.
7.3 Specific end use(s)
 No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):
 800 mg/m³

Chemical Name	Dimethyl ether	Content %:20-40	
WEL-TWA: 400 ppm (766 mg/m ³) (WEL), 1000 ppm (1920 mg/m ³) (EU)	WEL-STEL: 500 ppm (958 mg/m ³) (WEL)	---	
BMGV: ---	Other information: ---		
Chemical Name	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	Content %:10-<20	
WEL-TWA: 800 mg/m ³	WEL-STEL: ---	---	
BMGV: ---	Other information: ---		
Chemical Name	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Content %:10-<20	
WEL-TWA: 800 mg/m ³	WEL-STEL: ---	---	
BMGV: ---	Other information: (WEL acc. to RCP-method, EH40)		
Chemical Name	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	Content %:1-<10	
WEL-TWA: 1200 mg/m ³	WEL-STEL: ---	---	
BMGV: ---	Other information: ---		
Chemical Name	Butanone	Content %:1-5	
WEL-TWA: 200 ppm (600 mg/m ³) (WEL, EU)	WEL-STEL: 300 ppm (899 mg/m ³) (WEL), 300 ppm (900 mg/m ³) (EU)	---	
BMGV: 70 µmol butan-2-one/l in urine, post shift (BMGV)	Other information: Sk		
Chemical Name	Ethyl acetate	Content %:1-<5	
WEL-TWA: 200 ppm	WEL-STEL: 400 ppm	---	
BMGV: ---	Other information: ---		
Chemical Name	Cyclohexane	Content %:1-5	
WEL-TWA: 100 ppm (350 mg/m ³) (WEL), 200 ppm (700 mg/m ³) (EU)	WEL-STEL: 300 ppm (1050 mg/m ³)	---	
BMGV: ---	Other information: ---		
Chemical Name	Hydrocarbons, C9, aromatics	Content %:1-5	
WEL-TWA: 500 mg/m ³ (Aromatics)	WEL-STEL: ---	---	
BMGV: ---	Other information: ---		
Chemical Name	Talc	Content %:	
WEL-TWA: 1 mg/m ³ (res. dust)	WEL-STEL: ---	---	
BMGV: ---	Other information: ---		
Chemical Name	Naphtha (petroleum), hydrotreated light	Content %:	
WEL-TWA: 1200 mg/m ³ (>= C7 normal and branched chain alkanes)	WEL-STEL: ---	---	
BMGV: ---	Other information: ---		

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
 ** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Dimethyl ether

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Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	1894	mg/m ³	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	471	mg/m ³	
	Environment - freshwater		PNEC	0,155	mg/l	
	Environment - sediment, freshwater		PNEC	0,681	mg/kg	
	Environment - soil		PNEC	0,045	mg/kg	
	Environment - sewage treatment plant		PNEC	160	mg/l	
	Environment - marine		PNEC	0,016	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1,549	mg/l	
	Environment - sediment, marine		PNEC	0,069	mg/kg	

Butanone						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term	DNEL	1161	mg/kg	
Workers / employees	Human - inhalation	Long term	DNEL	600	mg/m ³	
Consumer	Human - dermal	Long term	DNEL	142	mg/kg	
Consumer	Human - inhalation	Long term	DNEL	106	mg/m ³	
Consumer	Human - oral	Long term	DNEL	31	mg/kg	
	Environment - freshwater		PNEC	55,8	mg/l	
	Environment - marine		PNEC	55,8	mg/l	
	Environment - sediment, freshwater		PNEC	284,74	mg/kg	
	Environment - sediment, marine		PNEC	287,7	mg/kg	
	Environment - soil		PNEC	22,5	mg/kg	

Ethyl acetate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	63	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	734	mg/m ³	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	734	mg/m ³	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	1468	mg/m ³	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	1468	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	4,5	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	37	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	367	mg/m ³	
Consumer	Human - inhalation	Long term, local effects	DNEL	367	mg/m ³	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	734	mg/m ³	
Consumer	Human - inhalation	Short term, local effects	DNEL	734	mg/m ³	
	Environment - freshwater		PNEC	0,26	mg/l	
	Environment - marine		PNEC	0,026	mg/l	

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	Environment - water, sporadic (intermittent) release		PNEC	1,65	mg/l	
	Environment - sediment, freshwater		PNEC	1,25	mg/kg	
	Environment - sediment, marine		PNEC	0,125	mg/kg	
	Environment - soil		PNEC	0,24	mg/kg	
	Environment - sewage treatment plant		PNEC	650	mg/l	
	Environment - oral (animal feed)		PNEC	200	mg/kg	

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	149	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	447	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	149	mg/kg bw/day	

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	699	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/m3	
	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/d	

Hydrocarbons, C9, aromatics

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	25	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	150	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	32	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	11	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	11	mg/kg bw/day	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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Ensure good ventilation. This can be achieved by local suction or general air extraction.
 If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
 Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
 Wash hands before breaks and at end of work.
 Keep away from food, drink and animal feedingstuffs.
 Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
 Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
 Solvent resistant protective gloves (EN 374).
 Recommended
 Protective nitrile gloves (EN 374)
 Minimum layer thickness in mm:
 0,3
 Permeation time (penetration time) in minutes:
 > 480
 Protective hand cream recommended.

Skin protection - Other:
 Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments)

Respiratory protection:
 Normally not necessary.
 If OES or MEL is exceeded.
 Gas mask filter A (EN 14387), code colour brown
 At high concentrations:
 Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Thermal hazards:
 Not applicable

Additional information on hand protection - No tests have been performed.
 In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
 Selection of materials derived from glove manufacturer's indications.
 Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
 Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
 In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
 The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Aerosol, Substance: Liquid
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	-25 °C
Flash point:	-41 °C (DIN 53213 (Pensky-Martens, closed cup))
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Lower explosive limit:	0,6 Vol-%
Upper explosive limit:	18,0 Vol-%

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Vapour pressure:	85 hPa (20°C)
Vapour pressure:	231 hPa (50°C)
Vapour density (air = 1):	Not determined
Density:	0,84 g/cm ³ (20°C, DIN 51757)
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Not miscible
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	200 °C (Ignition temperature)
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Possible build up of explosive/highly flammable vapour/air mixture. Product is not explosive.
Oxidising properties:	Not determined
9.2 Other information	
Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	75,8 %

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

10.5 Incompatible materials

See also section 7.

Avoid contact with oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.

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Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

Dimethyl ether						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	164	mg/l/4h	Rat		
Germ cell mutagenicity:						Negative
Germ cell mutagenicity (in vitro):					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity (in vitro):					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity (in vivo):					OECD 477 (Genetic Toxicology - Sex-Linked Recessive Lethal Test in Drosophila melanogaster)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Repeated dose toxicity:	NOAEC	47106	mg/m3	Rat	OECD 452 (Chronic Toxicity Studies)	Negative2a
Symptoms:						unconsciousness, headaches, mucous membrane irritation, dizziness, nausea and vomiting.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5840	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2920	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>25,2	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant (Analogous conclusion)
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Analogous conclusion, No (inhalation and skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
Carcinogenicity:						Analogous conclusion, Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure (STOT-RE):						Negative
Aspiration hazard:						Yes
Respiratory tract irritation:						Not irritant

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Symptoms:						dizziness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
Symptoms:						headaches, fatigue, dizziness, nausea, cramps, itching
Symptoms:						dizziness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5840	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>2920	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Acute toxicity, by inhalation:	LC50	>23,3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Serious eye damage/irritation:				Rabbit		Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Carcinogenicity:						Negative
Reproductive toxicity:	NOAEL	9000	ppm	Rat	OECD 416 (Two-generation Reproduction Toxicity Study)	Negative
Aspiration hazard:						Yes
Aspiration hazard:						Yes
Symptoms:						diarrhoea, headaches, dizziness, nausea and vomiting.
Symptoms:						dizziness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
Teratogenicity:	NOAEC	1200	ppm	Rat		Negative

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2800	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	

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Acute toxicity, by inhalation:	LC50	>23,3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity (in vitro):					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity (in vivo):		2000	mg/kg	Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Reproductive toxicity:	LOAEL	9000	ppm	Rat	OECD 416 (Two-generation Reproduction Toxicity Study)	Negative
Aspiration hazard:						Yes
Symptoms:						dizziness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

Butanone

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2600	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	5000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	34,5	mg/l/4h	Rat		
Skin corrosion/irritation:						Mild irritant, Repeated exposure may cause skin dryness or cracking.
Respiratory or skin sensitisation:						Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						respiratory distress, dizziness, unconsciousness, drop in blood pressure, coughing, headaches, cramps, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting., mental confusion

Ethyl acetate

Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5620	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>18000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	>28,6	mg/l/4h	Rat		
Skin corrosion/irritation:		4	h	Rabbit		Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:						Irritant

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Respiratory or skin sensitisation:						No indications of such an effect.
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Symptoms:						lack of appetite, breathing difficulties, dizziness, unconsciousness, drop in blood pressure, cornea opacity, coughing, headaches, gastrointestinal disturbances, intoxication, drowsiness, mucous membrane irritation, dizziness, salivation, nausea and vomiting.

Cyclohexane						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	12750	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	14	mg/l/4h	Rat		
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:						Mild irritant
Respiratory or skin sensitisation:						Not sensitizing
Germ cell mutagenicity (in vitro):						Negative
Specific target organ toxicity - single exposure (STOT-SE):	LOAEL	0,09	mg/l			May cause drowsiness or dizziness.
Aspiration hazard:						Yes
Symptoms:						lack of appetite, abdominal pain, dizziness, unconsciousness, coughing, collapse, headaches, cramps, gastrointestinal disturbances, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

Hydrocarbons, C9, aromatics						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000- <5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Skin corrosion/irritation:						Mild irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitizing
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative
Reproductive toxicity:						Negative
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness., May cause respiratory irritation.
Aspiration hazard:						Yes
Respiratory tract irritation:						Irritant

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Symptoms:						respiratory distress, coughing, burning of the membranes of the nose and throat, dizziness, dizziness, headaches, nausea, unconsciousness, fever, ear noises, drying of the skin.
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Talc						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitising
Germ cell mutagenicity:						Negative
Carcinogenicity:						Negative
Symptoms:						mucous membrane irritation
Teratogenicity:				Rat		Negative

Naphtha (petroleum), hydrotreated light						
Toxicity/effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	>5	mg/l/4h	Rat		
Serious eye damage/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitising
Aspiration hazard:						Yes
Symptoms:						dizziness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							n.d.a.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment:							n.d.a.
Other adverse effects:							n.d.a.
Other information:							According to the recipe, contains no AOX.

Dimethyl ether							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

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Toxicity to fish:	LC50	96h	2695	mg/l	Pimephales promelas		
Toxicity to fish:	LC50	96h	3082	mg/l	Salmo gairdneri		
Toxicity to fish:	LC50	96h	>4000	mg/l	Poecilia reticulata		
Toxicity to daphnia:	EC50	48h	>4000	mg/l	Daphnia magna		
Toxicity to algae:	EC0	96h	154,9	mg/l	Chlorella vulgaris	QSAR	
Persistence and degradability:		28d	5	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Not readily biodegradable
Bioaccumulative potential:	Log Pow		-0,07				Bioaccumulation is unlikely (LogPow < 1). 25°C (pH 7)
Mobility in soil:	H (Henry)		518,6	Pa*m3/mol			No adsorption in soil.
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10		>1600	mg/l	Pseudomonas putida		
Water solubility:			45,60	mg/l			25°C

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	11,4	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	NOEC/NO EL	21d	1	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
Toxicity to daphnia:	EC50	48h	3	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	EC50	72h	30	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	81	%			Analogous conclusion
Bioaccumulative potential:	Log Pow		3,4-5,2				
Bioaccumulative potential:	BCF		242-253				
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Other information:	DOC						DOC-elimination degree (complexing organic substance) >= 80%/28d.; n.a.
Water solubility:							Insoluble

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	13,4	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	EL50	48h	3	mg/l	Daphnia magna		
Toxicity to algae:	EL50	72h	10 - 30	mg/l	Pseudokirchneriella subcapitata		
Toxicity to algae:	NOELR	72h	10	mg/l	Pseudokirchneriella subcapitata		
Persistence and degradability:							Readily biodegradable
Water solubility:			2,6	mg/l			25°C

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Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	3 -10	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	NOELR	21d	1 -1,6	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
Toxicity to daphnia:	EL50	48h	4,6 - 10	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	EbL50	72h	10-30	mg/kg	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	NOEC/NOEL	72h	10	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	98	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Completely biodegradable.
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Toxicity to bacteria:	EL50	48h	11,14	mg/l			calculated value
Water solubility:			2	mg/l			Insoluble

Butanone							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1690	mg/l	Lepomis macrochirus		
Toxicity to daphnia:	EC50	48h	308	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	ErC50	96h	2029	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	EbC50	16h	4300	mg/l	Scenedesmus subspicatus		
Persistence and degradability:		28d	98	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
Bioaccumulative potential:	Log Pow		0,29				Bioaccumulation is unlikely (LogPow < 1).
Mobility in soil:	H (Henry)		0,0000 244	atm*m3/mol			25°C
Other information:	BOD		>60	%			
Other information:	BOD/COD		>50	%			
Other information:	DOC		>70	%			

Ethyl acetate							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	230	g/m3	Pimephales promelas		
Toxicity to daphnia:	EC50	48h	610	mg/l	Daphnia magna		

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Toxicity to algae:	NOEC/NO EL	96h	2000	mg/l	Scenedesmus subspicatus		
Toxicity to algae:	IC50	48h	3300	mg/l	Scenedesmus subspicatus		
Persistence and degradability:		28d	93,9	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	
Persistence and degradability:		28d	100	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	
Bioaccumulative potential:	BCF		30				(Fish)
Bioaccumulative potential:	Log Pow		0,73				Bioaccumulation is unlikely (LogPow < 1).
Mobility in soil:	H (Henry)		0,00012	atm*m3/mol			
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance
Water solubility:			80	g/l			Mixable 25°C

Cyclohexane

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	4,53	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EC50	48h	3,78	mg/l	Daphnia magna		Does not conform with EU classification.
Toxicity to algae:	IC50	72h	>500	mg/l	Desmodesmus subspicatus		Does not conform with EU classification.
Persistence and degradability:		28d	6	%			Not readily biodegradable
Bioaccumulative potential:	Log Pow		3,44				A notable biological accumulation potential has to be expected (LogPow > 3).
Results of PBT and vPvB assessment:							n.a.
Toxicity to bacteria:	EC50	5min	200	mg/l	Photobacterium phosphoreum		
Water solubility:			0,05	g/l			20°C

Hydrocarbons, C9, aromatics

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	9,22	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	EC50	48h	21,3	mg/l			
Toxicity to algae:	EC50	72h	2,6-2,9	mg/l	Pseudokirchneriella subcapitata		
Persistence and degradability:		28d	54-56	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	
Persistence and degradability:		28d	78	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Results of PBT and vPvB assessment:							No PBT substance, No vPvB substance

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Talc							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Water solubility:			< 0,1	%			

Naphtha (petroleum), hydrotreated light							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50		>1-10	mg/l			
Toxicity to algae:	LC50		>1-10	mg/l			
Bioaccumulative potential:	Log Pow		2,9-4				

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2001/118/EC, 2001/119/EC, 2001/573/EC)

16 05 04 gases in pressure containers (including halons) containing dangerous substances

08 01 11 waste paint and varnish containing organic solvents or other dangerous substances

Recommendation:

Pay attention to local and national official regulations

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations

Recommendation:

Do not perforate, cut up or weld uncleaned container.

SECTION 14: Transport information

General statements

UN number: 1950

Transport by road/by rail (ADR/RID)

UN proper shipping name:

UN 1950 AEROSOLS

Transport hazard class(es): 2.1

Packing group: -

Classification code: 5F

LQ (ADR 2013): 1 L

LQ (ADR 2009): 2

Environmental hazards: environmentally hazardous

Tunnel restriction code: D



Transport by sea (IMDG-code)

UN proper shipping name:

AEROSOLS (NAPHTHA (PETROLEUM))

Transport hazard class(es): 2.1

Packing group: -

EmS: F-D, S-U

Marine Pollutant: Yes

Environmental hazards: environmentally hazardous



Transport by air (IATA)

UN proper shipping name:

Aerosols, flammable

Transport hazard class(es): 2.1

Packing group: -

Environmental hazards: Not applicable



Special precautions for user

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Persons employed in transporting dangerous goods must be trained.
 All persons involved in transporting must observe safety regulations.
 Precautions must be taken to prevent damage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Freighted as packaged goods rather than in bulk, therefore not applicable.
 Minimum amount regulations have not been taken into account.
 Danger code and packing code on request.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:	Yes
Comply with trade association/occupational health regulations.	
Observe youth employment law (German regulation).	
Regulation (EC) No 1907/2006, Annex XVII	
VOC (1999/13/EC):	75,83% (636,9 g/l)

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: 2, 3, 8, 11, 12

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Irrit. 2, H315	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.
Aerosol 1, H222	Classification based on test data.
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aerosol 3, H229	Classification based on test data.

The following phrases represent the posted R phrases / H phrases, Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

10 Flammable.
 11 Highly flammable.
 12 Extremely flammable.
 36 Irritating to eyes.
 37 Irritating to respiratory system.
 38 Irritating to skin.
 50 Very toxic to aquatic organisms.
 51 Toxic to aquatic organisms.
 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 53 May cause long-term adverse effects in the aquatic environment.
 65 Harmful: may cause lung damage if swallowed.
 66 Repeated exposure may cause skin dryness or cracking.
 67 Vapours may cause drowsiness and dizziness.
 H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.

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H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H220 Extremely flammable gas.

Skin Irrit. — Skin irritation
 STOT SE — Specific target organ toxicity - single exposure - narcotic effects
 Aquatic Chronic — Hazardous to the aquatic environment - chronic
 Aerosol — Aerosols
 Asp. Tox. — Aspiration hazard
 Flam. Gas — Flammable gases (including chemically unstable gases)
 Flam. Liq. — Flammable liquid
 Eye Irrit. — Eye irritation
 Aquatic Acute — Hazardous to the aquatic environment - acute
 STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

Any abbreviations and acronyms used in this document:

AC Article Categories
 acc., acc. to according, according to
 ACGIH American Conference of Governmental Industrial Hygienists
 ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
 AOEL Acceptable Operator Exposure Level
 AOX Adsorbable organic halogen compounds
 approx. approximately
 Art., Art. no. Article number
 ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
 BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
 BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
 BCF Bioconcentration factor
 BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)
 BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)
 BMGV Biological monitoring guidance value (EH40, UK)
 BOD Biochemical oxygen demand
 BSEF Bromine Science and Environmental Forum
 bw body weight
 CAS Chemical Abstracts Service
 CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
 CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques
 CIPAC Collaborative International Pesticides Analytical Council
 CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
 CMR carcinogenic, mutagenic, reproductive toxic
 COD Chemical oxygen demand
 CTFA Cosmetic, Toiletry, and Fragrance Association
 DMEL Derived Minimum Effect Level
 DNEL Derived No Effect Level
 DOC Dissolved organic carbon
 DT50 Dwell Time - 50% reduction of start concentration
 DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)
 dw dry weight
 e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
 EC European Community
 ECHA European Chemicals Agency
 EEA European Economic Area
 EEC European Economic Community
 EINECS European Inventory of Existing Commercial Chemical Substances
 ELINCS European List of Notified Chemical Substances
 EN European Norms
 EPA United States Environmental Protection Agency (United States of America)
 ERC Environmental Release Categories
 ES Exposure scenario

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etc. et cetera
 EU European Union
 EWC European Waste Catalogue
 Fax. Fax number
 gen. general
 GHS Globally Harmonized System of Classification and Labelling of Chemicals
 GWP Global warming potential
 HET-CAM Hen's Egg Test - Chorionallantoic Membrane
 HGWP Halocarbon Global Warming Potential
 IARC International Agency for Research on Cancer
 IATA International Air Transport Association
 IBC Intermediate Bulk Container
 IBC (Code) International Bulk Chemical (Code)
 IC Inhibitory concentration
 IMDG-code International Maritime Code for Dangerous Goods
 incl. including, inclusive
 IUCLID International Uniform Chemicals Information Database
 LC lethal concentration
 LC50 lethal concentration 50 percent kill
 LCLo lowest published lethal concentration
 LD Lethal Dose of a chemical
 LD50 Lethal Dose, 50% kill
 LDLo Lethal Dose Low
 LOAEL Lowest Observed Adverse Effect Level
 LOEC Lowest Observed Effect Concentration
 LOEL Lowest Observed Effect Level
 LQ Limited Quantities
 MARPOL International Convention for the Prevention of Marine Pollution from Ships
 n.a. not applicable
 n.av. not available
 n.c. not checked
 n.d.a. no data available
 NIOSH National Institute of Occupational Safety and Health (United States of America)
 NOAEC No Observed Adverse Effective Concentration
 NOAEL No Observed Adverse Effect Level
 NOEC No Observed Effect Concentration
 NOEL No Observed Effect Level
 ODP Ozone Depletion Potential
 OECD Organisation for Economic Co-operation and Development
 org. organic
 PAH polycyclic aromatic hydrocarbon
 PBT persistent, bioaccumulative and toxic
 PC Chemical product category
 PE Polyethylene
 PNEC Predicted No Effect Concentration
 POCP Photochemical ozone creation potential
 ppm parts per million
 PROC Process category
 PTFE Polytetrafluorethylene
 REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
 REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
 RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
 SADT Self-Accelerating Decomposition Temperature
 SAR Structure Activity Relationship
 SU Sector of use
 SVHC Substances of Very High Concern
 Tel. Telephone
 ThOD Theoretical oxygen demand
 TOC Total organic carbon
 TRGS Technische Regeln für Gefahrstoffe (= Technical Regulations for Hazardous Substances)
 UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
 VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

GB

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VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).
WHO World Health Organization
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.

These statements were made by:

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