

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 21.04.2021

V- 3.0

Revision: 20.04.2021

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

1.1 Product identifier

Trade name: **SOLL RAPID Hardener**

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

Identified uses: professional use.
 Uses advised against: do-it-yourself

Application of the substance / the mixture

Hardening agent/ Curing agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: UAB HELVINA
 Parko str. 96, Ramuciai,
 LT-54464 Kaunas distr., Lithuania
 Tel. +370 37 308901
 Fax. +370 37 308902
 info@helvina.lt; www.helvina.lt

Further information obtainable from:

info@helvina.lt

1.4 Emergency telephone number:

Poison control and information office: Tel.: +370 5 236 2052 or +370 687 53378

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02 GHS07 GHS08

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Signal word	Danger
Hazard-determining components of labelling:	hexamethylene diisocyanate homopolymer n-butyl acetate toluene-diisocyanate aromatic polyisocyanate tosyl isocyanate
Hazard statements	H225 Highly flammable liquid and vapour. H332 Harmful if inhaled. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction. H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. P284 In case of inadequate ventilation wear respiratory protection. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
Additional information:	EUH066 Repeated exposure may cause skin dryness or cracking. Contains isocyanates. May produce an allergic reaction. As from 24 August 2023 adequate training is required before industrial or professional use.
2.3 Other hazards	
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.

* SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 123-86-4	n-butyl acetate	25-50%
EINECS: 204-658-1	☠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336, EUH066	
Reg.nr.: 01-2119485493-29		
CAS: 28182-81-2	hexamethylene diisocyanate homopolymer	10-25%
NLP: 500-060-2	⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	
Reg.nr.: 01-2119485796-17		
CAS: 53317-61-6	aromatic polyisocyanate	10-<20%
NLP: 500-120-8	⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	5-15%
EINECS: 203-603-9	☠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	
Reg.nr.: 01-2119475791-29		

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CAS: 141-78-6	ethyl acetate	1-5%
EINECS: 205-500-4	⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	
Reg.nr.: 01-2119475103-46		
CAS: 1330-20-7	Reaction mass of ethylbenzene and xylene	1-5%
List no.: 905-588-0	⚠ Flam. Liq. 3, H226; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4,	
Reg.nr.: 01-2119539452-40	H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335;	
01-2119486136-34	Aquatic Chronic 3, H412	
CAS: 4083-64-1	tosyl isocyanate	0.1-<1%
EINECS: 223-810-8	⚠ Resp. Sens. 1, H334; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335,	
Reg.nr.: 01-2119980050-47	EUH014, EUH204	
	Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 %	
	STOT SE 3; H335: C ≥ 5 %	
	Skin Irrit. 2; H315: C ≥ 5 %	
CAS: 26471-62-5	toluene-diisocyanate	0.1-<0.5%
EINECS: 247-722-4	⚠ Acute Tox. 1, H330; ⚠ Resp. Sens. 1, H334; Carc. 2, H351; ⚠ Skin Irrit. 2,	
Reg.nr.: 01-2119454791-34	H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3,	
	H412, EUH204	
	Specific concentration limit: Resp. Sens. 1; H334: C ≥ 0.1 %	

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration. Take affected persons out of danger area and lay down.
After inhalation:	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
After skin contact:	Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After eye contact:	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing:	Do not induce vomiting; call for medical help immediately.
4.2 Most important symptoms and effects, both acute and delayed	No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed	No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

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5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire.
Hydrogen cyanide (HCN)
Isocyanate vapors.
Carbon monoxide and carbon dioxide

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.
Avoid contact with the eyes and skin.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents.
Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or sniff while working.
Do not allow to enter sewers/ surface or ground water.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.
Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store in a cool location.
Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.
Store away from oxidising agents.

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Further information about**storage conditions:**

Store in cool, dry conditions in well sealed receptacles.
 Store receptacle in a well ventilated area.

7.3 Specific end use(s)

No further relevant information available.

*** SECTION 8: Exposure controls/personal protection**

8.1 Control parameters**Ingredients with limit values that require monitoring at the workplace:****123-86-4 n-butyl acetate**

WEL (Great Britain) Short-term value: 966 mg/m³, 200 ppm
 Long-term value: 724 mg/m³, 150 ppm

IOELV (EU) Short-term value: 723 mg/m³, 150 ppm
 Long-term value: 241 mg/m³, 50 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEL (Great Britain) Short-term value: 548 mg/m³, 100 ppm
 Long-term value: 274 mg/m³, 50 ppm
 Sk

IOELV (EU) Short-term value: 550 mg/m³, 100 ppm
 Long-term value: 275 mg/m³, 50 ppm
 Skin

141-78-6 ethyl acetate

WEL (Great Britain) Short-term value: 1468 mg/m³, 400 ppm
 Long-term value: 734 mg/m³, 200 ppm

IOELV (EU) Short-term value: 1468 mg/m³, 400 ppm
 Long-term value: 734 mg/m³, 200 ppm

1330-20-7 Reaction mass of ethylbenzene and xylene

WEL (Great Britain) Short-term value: 441 mg/m³, 100 ppm
 Long-term value: 220 mg/m³, 50 ppm
 Sk; BMGV

IOELV (EU) Short-term value: 442 mg/m³, 100 ppm
 Long-term value: 221 mg/m³, 50 ppm
 Skin

4083-64-1 tosyl isocyanate

WEL (Great Britain) Short-term value: 0.07 mg/m³
 Long-term value: 0.02 mg/m³
 Sen; as -NCO

26471-62-5 toluene-diisocyanate

WEL (Great Britain) Short-term value: 0.07 mg/m³
 Long-term value: 0.02 mg/m³
 Sen; as -NCO

Regulatory information

WEL (Great Britain): EH40/2020
 IOELV (EU): (EU) 2019/1831

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DNELs**123-86-4 n-butyl acetate**

Dermal DNEL 7 mg/kg bw/day (long-term - systemic effects, workers)

Inhalative DNEL 960 mg/m³ (acute - systemic effects, workers)960 mg/m³ (acute - local effects, workers)480 mg/m³ (long-term - systemic effects, workers)480 mg/m³ (long-term - local effects, workers)**28182-81-2 hexamethylene diisocyanate homopolymer**Inhalative DNEL 1 mg/m³ (acute - local effects, workers)0.5 mg/m³ (long-term - local effects, workers)**108-65-6 2-methoxy-1-methylethyl acetate**

Dermal DNEL 153.5 mg/kg bw/day (long-term - systemic effects, workers)

Inhalative DNEL 275 mg/m³ (long-term - systemic effects, workers)**141-78-6 ethyl acetate**

Dermal DNEL 63 mg/kg bw/day (long-term - systemic effects, workers)

Inhalative DNEL 1,468 mg/m³ (acute - systemic effects, workers)1,468 mg/m³ (acute - local effects, workers)734 mg/m³ (long-term - systemic effects, workers)734 mg/m³ (long-term - local effects, workers)**1330-20-7 Reaction mass of ethylbenzene and xylene**

Dermal DNEL 212 mg/kg bw/day (long-term - systemic effects, workers)

Inhalative DNEL 442 mg/m³ (acute - systemic effects, workers)442 mg/m³ (acute - local effects, workers)221 mg/m³ (long-term - systemic effects, workers)221 mg/m³ (long-term - local effects, workers)**4083-64-1 tosyl isocyanate**

Dermal DNEL 0.92 mg/kg bw/day (long-term - systemic effects, workers)

Inhalative DNEL 3.24 mg/m³ (long-term - systemic effects, workers)**PNECs****123-86-4 n-butyl acetate**

PNEC 0.18 mg/l (freshwater environment)

0.018 mg/l (marine environment)

0.36 mg/l (intermittent releases)

35.6 mg/l (sewage treatment plants)

PNEC 0.981 mg/kg (freshwater sediment environment)

28182-81-2 hexamethylene diisocyanate homopolymer

PNEC 0.127 mg/l (freshwater environment)

0.0127 mg/l (marine environment)

1.27 mg/l (intermittent releases)

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38.3 mg/l (sewage treatment plants)

PNEC 266,700 mg/kg (freshwater sediment environment)

26,670 mg/kg (marine sediment environment)

53,182 mg/kg (soil)

108-65-6 2-methoxy-1-methylethyl acetate

PNEC 0.635 mg/l (freshwater environment)

0.0635 mg/l (marine environment)

6.35 mg/l (intermittent releases)

100 mg/l (sewage treatment plants)

PNEC 3.29 mg/kg (freshwater sediment environment)

0.329 mg/kg (marine sediment environment)

141-78-6 ethyl acetate

PNEC 0.24 mg/l (freshwater environment)

0.024 mg/l (marine environment)

1.65 mg/l (intermittent releases)

650 mg/l (sewage treatment plants)

PNEC 1.15 mg/kg (freshwater sediment environment)

0.115 mg/kg (marine sediment environment)

1330-20-7 Reaction mass of ethylbenzene and xylene

PNEC 6.58 mg/l (sewage treatment plants)

PNEC 12.46 mg/kg (freshwater sediment environment)

12.46 mg/kg (marine sediment environment)

PNEC 327 µg/l (freshwater environment)

327 µg/l (intermittent releases)

4083-64-1 tosyl isocyanate

PNEC 0.03 mg/l (freshwater environment)

0.003 mg/l (marine environment)

0.3 mg/l (intermittent releases)

0.4 mg/l (sewage treatment plants)

PNEC 0.0172 mg/kg (marine environment)

0.172 mg/kg (freshwater sediment environment)

0.0168 mg/kg (soil)

Ingredients with biological limit values:**1330-20-7 Reaction mass of ethylbenzene and xylene**

BMGV (Great Britain) 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift

Parameter: methyl hippuric acid

Regulatory information BMGV (Great Britain): EH40/2011**Additional information:** The lists valid during the making were used as basis.

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8.2 Exposure controls**Appropriate engineering controls**

No further data; see item 7.

Individual protection measures, such as personal protective equipment**General protective and hygienic measures:**

Ensure good ventilation/exhaustion at the workplace.
 Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
 Keep ignition sources away - Do not smoke.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.
 Do not eat or drink while working.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 Filter A2/P2

Hand protection

Protective gloves
 Check the permeability prior to each renewed use of the glove.
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374).

Material of gloves

Butyl rubber, BR
 Nitrile rubber, NBR
 PVA gloves
 Recommended thickness of the material: $\geq 0,7$ mm
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

Value for the permeation: Level 6 ≥ 480 min.
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Tightly sealed goggles

Body protection:

Protective work clothing

*** SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties**General Information**

Physical state	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	1 Vol %
Upper:	15 Vol %
Flash point:	21 °C
Auto-ignition temperature:	Not determined.

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Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	98 hPa
Density and/or relative density	
Density at 20 °C:	0.92-1.01 g/cm ³
Vapour density	Not determined.

9.2 Other information**Appearance:****Form:** Fluid**Important information on protection of health and environment, and on safety.****Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.**Change in condition****Evaporation rate** Not determined.**Information with regard to physical hazard classes**

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Highly flammable liquid and vapour.
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases	
in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity	No decomposition if used according to specifications.
10.2 Chemical stability	No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions	Reacts with water. Reacts with alkali, amines and strong acids. Reacts with oxidising agents. Fumes can combine with air to form an explosive mixture.
10.4 Conditions to avoid	Protect from heat and direct sunlight.
10.5 Incompatible materials:	No further relevant information available.

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10.6 Hazardous decomposition**products:**

Carbon monoxide and carbon dioxide
Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** Harmful if inhaled.**LD/LC50 values relevant for classification:****123-86-4 n-butyl acetate**

Oral LD50 10,760 mg/kg (rat)
Dermal LD50 >14,000 mg/kg (rabbit)
Inhalative LC50/4 h 23.4 mg/l (rat)

28182-81-2 hexamethylene diisocyanate homopolymer

Oral LD50 >2,500 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rat)
Inhalative ATE 1.5 mg/l (dust/ mist)

53317-61-6 aromatic polyisocyanate

Oral LD50 >5,000 mg/kg (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral LD50 >5,000 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
Inhalative LC50/6 h 4,345 mg/l (rat)

141-78-6 ethyl acetate

Oral LD50 6,100 mg/kg (rat)
Dermal LD50 >20,000 mg/kg (rabbit)
Inhalative LC50/6 h 58 mg/l (rat)

1330-20-7 Reaction mass of ethylbenzene and xylene

Oral LD50 3,523-4,000 mg/kg (rat)
Dermal LD50 12,126 mg/kg (rabbit)
Inhalative ATE 1.5 mg/l (dust/ mist)

4083-64-1 tosyl isocyanate

Oral LD50 2,330 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rat)

26471-62-5 toluene-diisocyanate

Oral LD50 5,110 mg/kg (rat)
Dermal LD50 >9,400 mg/kg (rabbit)
Inhalative ATE 0.005 mg/l (dust/ mist)

Primary irritant effect:**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Causes serious eye irritation.

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Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

11.2 Information on other hazards**Endocrine disrupting properties**

None of the ingredients is listed.

* SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:****123-86-4 n-butyl acetate**

LC50/96 h	18 mg/l (<i>Pimephales promelas</i>)
TT/16 h	115 mg/l (<i>Pseudomonas putida</i>)
EC50/48 h	44 mg/l (<i>daphnia</i>)
EC50/72 h	675 mg/l (<i>algae</i>)

53317-61-6 aromatic polyisocyanate

EC50	>10,000 mg/l (<i>microorganisms</i>)
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108-65-6 2-methoxy-1-methylethyl acetate

LC50/96 h	>100 mg/l (<i>fish</i>)
EC50/48 h	>500 mg/l (<i>Daphnia magna</i>)
EC20/30 min	>1,000 mg/l (<i>microorganisms</i>)
EC50/72 h	>1,000 mg/l (<i>Pseudokirchnerella subcapitata</i>)
EC50	>100 mg/l (<i>Pseudokirchnerella subcapitata</i>)
	>100 mg/l (<i>Pimephales promelas</i>)
	>100 mg/l (<i>Daphnia magna</i>)

141-78-6 ethyl acetate

LC50/96 h	230 mg/l (<i>Pimephales promelas</i>)
EC50/48 h	165 mg/l (<i>Daphnia cucullata</i>)
EC50/72 h	>900 mg/l (<i>Scenedesmus subspicatus</i>)
EC3/16 h	650 mg/l (<i>Pseudomonas putida</i>)

1330-20-7 Reaction mass of ethylbenzene and xylene

EC50/72 h	4.6-4.9 mg/l (<i>microorganisms</i>)
EC50/73h	2.2-4.36 mg/l (<i>algae</i>)

4083-64-1 tosyl isocyanate

EC50/48 h	>100 mg/l (<i>Daphnia magna</i>)
EC50/72 h	30 mg/l (<i>Pseudokirchnerella subcapitata</i>)

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LC50/48 h >45 mg/l (fish)

26471-62-5 toluene-diisocyanate

LC50/96 h 133 mg/l (fish)

EC50/3 h >100 mg/l (microorganisms)

ErC50/96 h 4,300 mg/l (*Chlorella vulgaris*)EC50/48 h 12.5 mg/l (*Daphnia magna*)**12.2 Persistence and degradability****123-86-4 n-butyl acetate**

Biodegradation 83 % (readily biodegradable) (OECD 301 D, 28 d, aerobic)

28182-81-2 hexamethylene diisocyanate homopolymer

Biodegradation 1 % (not readily biodegradable) (OECD 301 C, 28 d, aerobic)

53317-61-6 aromatic polyisocyanate

Biodegradation 34 % (not readily biodegradable)

108-65-6 2-methoxy-1-methylethyl acetate

Biodegradation 100 % (readily biodegradable) (OECD 302 B, 8 d, aerobic)

141-78-6 ethyl acetate

Biodegradation 93.9 % (readily biodegradable) (OECD 301 B, aerobic)

1330-20-7 Reaction mass of ethylbenzene and xylene

Biodegradation 87.8 % (readily biodegradable) (OECD 301 F, 28 d, aerobic)

4083-64-1 tosyl isocyanate

Biodegradation 86 % (readily biodegradable) (OECD 301 D, 28 d, aerobic)

26471-62-5 toluene-diisocyanate

Biodegradation 0 % (not readily biodegradable) (OECD 302 C, 28 d, aerobic)

12.3 Bioaccumulative potential**123-86-4 n-butyl acetate**

BCF 15.3 (-)

log Pow 2.3

28182-81-2 hexamethylene diisocyanate homopolymer

BCF 3.2 (-)

log Kow 9.81 (Kow)

108-65-6 2-methoxy-1-methylethyl acetate

log Pow 0.56

141-78-6 ethyl acetate

BCF 30 (-)

log Pow 0.66

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12.4 Mobility in soil**123-86-4 n-butyl acetate**

log Koc 1.27

108-65-6 2-methoxy-1-methylethyl acetate

Koc 1.7

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects**Additional ecological information:****General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.**European waste catalogue**

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

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.*** SECTION 14: Transport information****14.1 UN number or ID number****ADR, IMDG, IATA** UN1263**14.2 UN proper shipping name****ADR** 1263 PAINT RELATED MATERIAL
IMDG, IATA PAINT RELATED MATERIAL**14.3 Transport hazard class(es)****ADR, IMDG, IATA****Class** 3**Label** 3**14.4 Packing group****ADR, IMDG, IATA** II**14.5 Environmental hazards:** Not applicable.**Marine pollutant (IMDG):** No**14.6 Special precautions for user** Warning: Flammable liquids.**Hazard identification number (Kemler code):** 33**EMS Number:** F-E,S-E

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Stowage Category B
14.7 Maritime transport in bulk according to IMO instruments Not applicable.

Transport/Additional information:

ADR
Limited quantities (LQ) 5L
Transport category 2
Tunnel restriction code D/E

IMDG
Limited quantities (LQ) 1L
UN "Model Regulation": UN 1263 PAINT RELATED MATERIAL, 3, II

* SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.
Seveso category P5c FLAMMABLE LIQUIDS
Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006
ANNEX XVII Conditions of restriction: 3, 74

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

National regulations:

Information about limitation of use:

Employment restrictions concerning juveniles must be observed.
 Employment restrictions concerning pregnant and lactating women must be observed.

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15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

*** SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 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.
 H330 Fatal if inhaled.
 H332 Harmful if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.
 EUH014 Reacts violently with water.
 EUH066 Repeated exposure may cause skin dryness or cracking.
 EUH204 Contains isocyanates. May produce an allergic reaction.

Classification according to Regulation (EC) No 1272/2008

Flammable liquids

Bridging principles

Acute toxicity - inhalation

Serious eye damage/eye irritation

Respiratory sensitisation

Skin sensitisation

Specific target organ toxicity (single exposure)

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Version number of previous**version:**

2.1

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 1: Acute toxicity – Category 1
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Resp. Sens. 1: Sensitisation - Respiratory. Hazard category 1

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Skin Sens. 1: Sensitisation - Skin. Hazard Category 1

Carc. 2: Carcinogenicity. Hazard Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources

European Chemicals Agency, <http://echa.europa.eu/>

*** Data compared to the previous
version altered.**