

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

Section 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	Sitol Primer Deck Caulking
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1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended use

Primer for seam sealants.

1.3 Details of the supplier of the safety data sheet

Company name	TORGGLER S.R.L.
Full address	Via Prati Nuovi 9
Town	Marlengo
Postal code	39020
Province	BZ
Country	Italy
Phone number	+39 0473 282400
Fax	+39 0473 282501
e-mail address of the competent person responsible for the Safety Data Sheet	reach@torggler.com

1.4 Emergency telephone number

For urgent inquiries refer to	+39 348 662 70 93 (08.00 - 17.30)
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Section 2 Hazards identification

2.1 Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

2.2 Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms**Signal word**

Danger

Section 2

Hazard statements

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P233	Keep container tightly closed.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P312	Call a poison center/doctor if you feel unwell.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P370+P378	In case of fire: Use water, foam, chemical powder, sand to extinguish.
P261	Avoid breathing mist, spray, vapours.

Supplementary hazard statements

EUH066	Repeated exposure may cause skin dryness or cracking.
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Contains

ETHYL ACETATE
1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer
N-BUTYL ACETATE
2-ethylhexanal
succinic anhydride

VOC (Directive 2004/42/EC)

Product not intended for the uses provided for in Directive 2004/42/EC

Reserved for industrial and professional users.

2.3 Other hazards

During use, it can form explosive/flammable mixtures with air.

On the basis of available data, the product does not contain any PBT or vPvB in percentage $\geq$ than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration $\geq$ 0.1%.

Section 3 Composition/information on ingredients**3.2 Mixtures****ETHYL ACETATE**

Concentration	$60 \leq x < 73 \%$
CAS number	141-78-6
EC number	205-500-4
INDEX number	607-022-00-5
Registration Number	01-2119475103-46-xxxx
Hazard classification	- Flam. Liq. 2; H225 - Eye Irrit. 2; H319 - STOT SE 3; H336
Additional classification	EUH066
Substance with a community workplace exposure limit.	

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate

Concentration	$12.6 \leq x < 19.6 \%$
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Section 3

CAS number	140921-24-0
EC number	411-700-4
INDEX number	616-079-00-5
Registration Number	01-0000015906-63-xxxx
Hazard classification	▪ Skin Sens. 1; H317

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer

Concentration	$12.6 \leq x < 19.6 \%$
CAS number	53880-05-0
EC number	500-125-5
Registration Number	01-2119488734-24-xxxx
Hazard classification	▪ Skin Sens. 1B; H317 ▪ STOT SE 3; H335

N-BUTYL ACETATE

Concentration	$6.3 \leq x < 9.8 \%$
CAS number	123-86-4
EC number	204-658-1
INDEX number	607-025-00-1
Hazard classification	▪ Flam. Liq. 3; H226 ▪ STOT SE 3; H336
Additional classification	EUH066
Substance with a community workplace exposure limit.	

2-ethylhexanal

Concentration	$0.81 \leq x < 1.26 \%$
CAS number	123-05-7
EC number	204-596-5
Hazard classification	▪ Flam. Liq. 3; H226 ▪ Skin Sens. 1B; H317 ▪ Repr. 2; H361

succinic anhydride

Concentration	$0.55 \leq x < 1 \%$
CAS number	108-30-5
EC number	203-570-0
INDEX number	607-103-00-5
Registration Number	01-2119485841-30-xxxx
Hazard classification	▪ Acute Tox. 4; H302 ▪ Skin Corr. 1B; H314 ▪ Skin Sens. 1; H317 ▪ Eye Dam. 1; H318 ▪ Resp. Sens. 1; H334 ▪ STOT SE 3; H335
Additional classification	EUH071

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Section 4 First aid measures

4.1 Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical

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advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

First responder self-protection: Remove all ignition sources. Avoid contact with skin, eyes or clothing. Use the required personal protective equipment.

Rescuers protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2 Most important symptoms and effects, both acute and delayed

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

Itching. Rash. It may cause redness and tearing of the eyes. Inhalation or high vapour concentrations may cause symptoms such as headaches, dizziness, fatigue, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Call a poison center/doctor if you feel unwell.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

It may cause sensitisation in susceptible individuals. Treat symptomatically.

Section 5 Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

Hazardous combustion products: Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxide (NO_x). Hydrogen cyanide.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7 Handling and storage

7.1 Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany)

3 – Flammable liquids

Applicable technical instruction according to Royal Decree 656/2017:

Classification	Storage in fixed containers	Storage in mobile containers
• H225 – Flam. Liq. 2	MIE APQ-1 – Storage of flammable and combustible liquids in fixed containers	MIE APQ-10 – Storage in mobile containers

Respect the joint storage conditions established in Royal Decree 656/2017.

Store at a temperature between +5 °C and +25 °C.

7.3 Specific end use(s)

Primers, sealers and substrates.

Section 8

Section 8 Exposure controls/personal protection

8.1 Control parameters

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing

Methanol (CAS 67-56-1): (EU) TWA: 200 ppm

Regulatory references

ACGIH	ACGIH 2026
European Union-OEL	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
Ireland-OELV	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Malta-TLV	PROTECTION OF THE HEALTH AND SAFETY OF WORKERS FROM THE RISKS RELATED TO CHEMICAL AGENTS AT WORK REGULATIONS (S.L.424.24). PROTECTION OF WORKERS FROM THE RISKS RELATED TO EXPOSURE TO CARCINOGENS OR MUTAGENS AT WORK REGULATIONS (S.L.424.22)

ETHYL ACETATE

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
ACGIH		200					--
European Union-OEL	734	200	1,468	400			--
Ireland-OELV	734	200	1,468	400			--
Malta-TLV	734	200	1,468	400			--

N-BUTYL ACETATE

	TWA		STEL		CEILING		Remarks
	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	
ACGIH		50		150			--
European Union-OEL	241	50	723	150			--
Ireland-OELV	241	50	723	150			--
Malta-TLV	241	50	723	150			--

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, dermal		3.3 mg/kg bw/d
Consumers, long-term, inhalation		580 µg/m ³
Consumers, long-term, oral		
Workers, long-term, dermal		9.3 mg/kg bw/d
Workers, long-term, inhalation		3.3 mg/m ³

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Workers, short-term, inhalation	580 µg/m ³	
Workers, long-term, inhalation	290 µg/m ³	

8.2 Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

When choosing risk management measures and operating conditions, consult the exposure scenarios attached.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

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The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

Protect your hands with gloves of the following type:

Protect your hands with gloves of the following type

Material	Thickness	Breakthrough time
Butyl rubber (IIR) –	0.5 mm Glove thickness must be selected based on the minimum required breakthrough time.	Breakthrough time to be verified with the supplier.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344/EN ISO 13034).

Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid	
Colour	transparent	
Odour	solvent	
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point	76 °C (168.8 °F)	
Flammability	Not applicable	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	-4 °C (24.8 °F)	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
pH	not soluble in water	
Kinematic viscosity	< 20.5 mm ² /s	Temperature: 40 °C (104 °F)
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	1,100 hPa	Temperature: 50 °C (122 °F)
Density and/or relative density	1 g/ml	
Relative vapour density	Not available	

Section 9

Particle characteristics

Information not available.

9.2 Other information

9.2.1 Information with regard to physical hazards

Information not available.

9.2.2 Other safety characteristics

Total solids	0 %	Temperature: 250 °C (482 °F)
VOC (Directive 2010/75/EU)	64.00 % – 640 g/l	

Section 10 Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

N-BUTYL ACETATE

Decomposes on contact with: water

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum

May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide

Forms explosive mixtures with: air

N-BUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents

May react dangerously with: alkaline hydroxides, potassium tert-butoxide

Forms explosive mixtures with: air

10.4 Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames

N-BUTYL ACETATE

Avoid exposure to: moisture, sources of heat, naked flames

10.5 Incompatible materials

ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, chlorosulphuric acid

N-BUTYL ACETATE

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc

Section 10

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

Section 11 Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

11.1.2 Information on likely routes of exposure

N-BUTYL ACETATE

WORKERS: inhalation; contact with the skin.

Mixture information:

INHALATION: It may cause drowsiness or dizziness.

CONTACT WITH EYES: It causes severe eye irritation.

CONTACT WITH SKIN: It may cause sensitization by skin contact. Repeated exposure may cause dryness or cracking of the skin.

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

11.1.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

N-BUTYL ACETATE

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

Itching. Rash. It may cause redness and tearing of the eyes. Inhalation or high vapour concentrations may cause symptoms such as headaches, dizziness, fatigue, nausea and vomiting.

11.1.4 Interactive effects

N-BUTYL ACETATE

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

11.1.5 ACUTE TOXICITY

N-BUTYL ACETATE

LD50 (Oral):	> 6,400 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 5,000 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	21.1 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate

LD50 (Oral):	> 2,000 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rat

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer

LD50 (Oral):	14,000 mg/kg	Species/guidelines: Rat
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LC50 (Inhalation mists/powders):	5.01 mg/l	Exposure duration: 4 hours Species/guidelines: Rat
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2-ethylhexanal

LD50 (Oral):	3,730 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 16,440 mg/kg	Species/guidelines: Rat
LC50 (Inhalation vapours):	> 6.83 mg/l	Exposure duration: 4 hours Species/guidelines: Rat

succinic anhydride

LD50 (Oral):	1,510 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	> 2,000 mg/kg	Species/guidelines: Rat

11.1.6 SKIN CORROSION/IRRITATION

Repeated exposure may cause skin dryness or cracking.

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation.

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

11.1.9 GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

11.1.10 CARCINOGENICITY

Does not meet the classification criteria for this hazard class

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness.

11.1.13 STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

11.1.14 ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2 Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

Section 12 Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

Section 12

12.1 Toxicity

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate

LC50 - for Fish	199.2 mg/l	Exposure duration: 96 hours Species/guidelines: Danio rerio
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Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer

EC50 - for Crustacea	3.36 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	1.51 mg/l	Exposure duration: 96 hours Species/guidelines: Cyprinus carpio
EC50 - for Algae / Aquatic Plants	3.1 mg/l	Exposure duration: 72 hours Species/guidelines: Desmodesmus subspicatus

2-ethylhexanal

EC50 - for Crustacea	11.5 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
EC50 - for Algae / Aquatic Plants	38 mg/l	Exposure duration: 72 hours Species/guidelines: Desmodesmus subspicatus

succinic anhydride

EC50 - for Crustacea	> 102 mg/l	Exposure duration: 48 hours Species/guidelines: Daphnia magna
LC50 - for Fish	> 100 mg/l	Exposure duration: 96 hours Species/guidelines: Danio rerio
EC50 - for Algae / Aquatic Plants	> 100 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata

12.2 Persistence and degradability

ETHYL ACETATE

Solubility in water	> 10,000 mg/l
Degradability	Rapidly degradable

N-BUTYL ACETATE

Solubility in water	$1,000 \leq x \leq 10,000$ mg/l
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2-ethylhexanal

Degradability	Rapidly degradable
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succinic anhydride

Degradability	Rapidly degradable
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12.3 Bioaccumulative potential

ETHYL ACETATE

Bioconcentration factor	30
Partition coefficient n-octanol/water	0.68 LogKow

N-BUTYL ACETATE

Bioconcentration factor	15.3
Partition coefficient n-octanol/water	2.3 LogKow

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate

Partition coefficient n-octanol/water	6.853 LogKow
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2-ethylhexanal

Partition coefficient n-octanol/water	3.07 LogKow
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succinic anhydride

Partition coefficient n-octanol/water	2.44 LogKow
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12.4 Mobility in soil**N-BUTYL ACETATE**

Partition coefficient soil/water	< 3 LogKoc
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12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage $\geq$ than 0,1%.

12.6 Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7 Other adverse effects

Information not available.

Section 13 Disposal considerations

EWC: 080409*.

13.1 Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Hazardous waste classification - Reg. (UE) 1357/2014

HP 3 – Flammable

HP 4 – Irritant — skin irritation and eye damage

HP 13 – Sensitising

Section 14 Transport information**14.1 UN number or ID number**

ADR / RID	IMDG	IATA
UN 1993	UN 1993	UN 1993

14.2 UN proper shipping name

ADR / RID	FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE – N-BUTYL ACETATE)
IMDG	FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE – N-BUTYL ACETATE)
IATA	FLAMMABLE LIQUID, N.O.S. (ETHYL ACETATE – N-BUTYL ACETATE)

Section 14

14.3 Transport hazard class(es)

	Class	Label	
ADR / RID	3	3	
IMDG	3	3	
IATA	3	3	

14.4 Packing group

ADR / RID	IMDG	IATA
II	II	II

14.5 Environmental hazards

ADR / RID	No	
IMDG	Not marine pollutant	
IATA	No	

14.6 Special precautions for user

ADR / RID			
Hazard identification No. - Kemler	33	Limited Quantities	1 L
Tunnel restriction code	(D/E)	Special provisions	274, 601, 640 D
IMDG			
EmS	F-E, S-E	Limited Quantities	
IATA			
Maximum quantity (Cargo)	60 L	Packaging instructions (Cargo)	364
Maximum quantity (Passengers)	5 L	Packaging instructions (Passengers)	353
Special provisions	A3		

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

Section 15 Regulatory information

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

Seveso Category - Directive 2012/18/EU:

P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

	Restrictions	Registration Number EU
Product restrictions	3, 40	
Contained substance		
	75	

Section 15

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Registration Number EU

On the basis of available data, the product does not contain any SVHC in percentage $\geq$ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

Authorisation
Number

Sunset date

Registration Number EU

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Regulation (EU) 2019/1021 - on persistent organic pollutants

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK1 – Low hazard to waters

15.2 Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

Section 16 Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1B	Skin sensitization, category 1B
STOT SE 3	Specific target organ toxicity - single exposure, category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

Section 16

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.

Legend

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EC50: Effective concentration (required to induce a 50% effect)
- EC: Identifier in ESIS (European archive of existing substances)
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

General Bibliography

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I ATP CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II ATP CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III ATP CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV ATP CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V ATP CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI ATP CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII ATP CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII ATP CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX ATP CLP)
13. Regulation (EU) 2017/776 (X ATP CLP)
14. Regulation (EU) 2018/669 (XI ATP CLP)
15. Regulation (EU) 2019/521 (XII ATP CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII ATP CLP)
17. Regulation (EU) 2019/1148

Section 16

General Bibliography

18. Delegated Regulation (EU) 2020/217 (XIV ATP CLP)
19. Delegated Regulation (EU) 2020/1182 (XV ATP CLP)
20. Delegated Regulation (EU) 2021/643 (XVI ATP CLP)
21. Delegated Regulation (EU) 2021/849 (XVII ATP CLP)
22. Delegated Regulation (EU) 2022/692 (XVIII ATP CLP)
23. Delegated Regulation (EU) 2023/707
24. Delegated Regulation (EU) 2023/1434 (XIX ATP CLP)
25. Delegated Regulation (EU) 2023/1435 (XX ATP CLP)
26. Delegated Regulation (EU) 2024/197 (XXI ATP CLP)
27. Delegated Regulation (EU) 2024/2564 (XXII ATP CLP)
28. Regulation (EU) 2024/2865
29. Delegated Regulation (EU) 2025/1222 (XXIII ATP CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Calculation methods for classification

Chemical and physical hazards:
Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards:
Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards:
Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes from the previous revision

This SDS has been prepared with a different software from the one previous revision. The new calculation does not allow us to identify all the differences compared to the previous version. We therefore recommend carefully reviewing all 16 sections of the SDS. We remain available to provide any clarification regarding the content or the changes made compared to the previous version, which is available to professional or industrial users.