Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

1.1 Product identifier

Product name	Bitumen Seal Bitumen Tack

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

Intended use
Solvent-based bituminous mastic for building construction

Identified uses
Use and application of a bituminous mastic (consumption use) – Consumer uses
Chemical Product Category (PC)
Adhesives, sealants [1]
Use and application of a bituminous mastic (professional use) – Professional uses
Chemical Product Category (PC)
Adhesives, sealants [1]
Environmental Release Categories (ERC / SPERC)
Widespread use of non- reactive processing aid (no inclusion into or onto article, outdoor) [8d]
Process categories (PROC)
Transfer of substance or mixture (charging and discharging) at non- dedicated facilities [8a]

Uses advised against
Uso dispersivo all'interno di ambienti non areati

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)

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 is given in sections 11 and 12 of this sheet.

Hazard classification		
Flammable liquid, category 3	H226	Flammable liquid and vapour.

Hazard classification		
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2 Label elements

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

Hazard pictograms



Signal word

Warning

Hazard statements	
H226	Flammable liquid and vapour.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements	
P501	Dispose of contents and container in accordance with local and national regulations.
P102	Keep out of reach of children.
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.
P403+P235	Store in a well-ventilated place. Keep cool.
P273	Avoid release to the environment.

2.3 Other hazards

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

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

Section 3 Composition/information on ingredients

3.2 Mixtures

Hydrocarbons, C9, aromatics

Concentration	5.5 ≤ x < 10 %
CAS number	64742-95-6
EC number	265-199-0
INDEX number	649-356-00-4
Registration Number	01-2119455851-35-xxxx
Hazard classification	▪ Flam. Liq. 3; H226 ▪ Asp. Tox. 1; H304 ▪ STOT SE 3; H335 ▪ STOT SE 3; H336 ▪ Aquatic Chronic 2; H411
Classification note according to Annex VI to the CLP Regulation:	P
Additional classification	EUH066
Substance with a community workplace exposure limit.	

XYLENE (MIXTURE OF ISOMERS)

Concentration	4.4 ≤ x < 6.8 %
CAS number	1330-20-7
EC number	215-535-7
INDEX number	601-022-00-9
Registration Number	01-2119488216-32-xxxx
Hazard classification	▪ Flam. Liq. 3; H226 ▪ Asp. Tox. 1; H304 ▪ Acute Tox. 4; H312 ▪ Skin Irrit. 2; H315 ▪ Eye Irrit. 2; H319 ▪ Acute Tox. 4; H332 ▪ STOT SE 3; H335 ▪ STOT RE 2; H373
Classification note according to Annex VI to the CLP Regulation:	C
LD50 (Dermal):	2,000 mg/kg
ATE (Inhalation - vapours)	11 mg/l
Substance with a community workplace exposure limit.	

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

No effects requiring implementation of special first aid measures are expected. The following information represents practical indications of correct behaviour in the event of contact with a chemical product, even if not hazardous.
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: Wash immediately and thoroughly with running water. Get medical advice if you feel symptoms.
SKIN: Wash with plenty of water. Get medical advice if you feel symptoms.
INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice.
INHALATION: Remove to open air. Get medical advice if you feel symptoms.

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

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

4.3 Indication of any immediate medical attention and special treatment needed

If symptoms occur, whether acute or delayed, consult a doctor.

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

Running water for skin and eye wash.

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.

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. 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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. 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
▪ H226 – Flam. Liq. 3	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.		

7.3 Specific end use(s)

Special uses:
Building and construction.

Section 8 Exposure controls/personal protection

8.1 Control parameters

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)

XYLENE (MIXTURE OF ISOMERS)

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
ACGIH		20					--	
European Union-OEL	221	50	442	100			Skin	
Ireland-OELV	221	50	442	100			Skin	
Malta-TLV	221	50	442	100			Skin	

Predicted no-effect concentration - PNEC	
Normal value of STP microorganisms	6.58 mg/l
Normal value in fresh water	0.327 mg/l
Normal value for fresh water sediment	12.46 mg/kg/d
Normal value in marine water	0.327 mg/l
Normal value for marine water sediment	12.46 mg/kg/d
Normal value for the terrestrial compartment	2.31 mg/kg/d
Normal value for water, intermittent release	0.327 mg/l

Health - Derived no-effect level - DNEL / DMEL	**Local effect**	**Systemic effect**
Consumers, short-term, inhalation	260 mg/m³	260 mg/m³
Consumers, long-term, dermal	Not available	125 mg/kg bw/d
Consumers, long-term, inhalation	65.3 mg/m³	65.3 mg/m³

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, oral	Not available	12.5 mg/kg bw/d
Workers, short-term, inhalation	442 mg/m³	442 mg/m³
Workers, long-term, dermal	Not available	212 mg/kg bw/d
Workers, long-term, inhalation	221 mg/m³	221 mg/m³

Hydrocarbons, C9, aromatics

	TWA		STEL		CEILING		Remarks	
	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm		
European Union-OEL	100	20					--	

Health - Derived no-effect level - DNEL / DMEL	Local effect	Systemic effect
Consumers, long-term, dermal		11 mg/kg bw/d
Consumers, long-term, inhalation		32 mg/m³
Consumers, long-term, oral		11 mg/kg bw/d
Workers, long-term, dermal		25 mg/kg bw/d
Workers, long-term, inhalation		150 mg/m³

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

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
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) –	**0.4 mm** –	**480 min** –
Nitrile rubber (NBR) –	**0.4 mm** –	**480 min** –

SKIN PROTECTION
Wear category I 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.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pasty liquid	
Colour	black	
Odour	slight odour of bitumen	
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point	155 °C (311 °F)	Substance: Hydrocarbons, C9, aromatics
Flammability	Flammable liquid and vapors	
Lower explosive limit	0.6 % (v/v)	Remarks: The product is not explosive but the formation of explosive air/gas mixtures is possible.
Upper explosive limit	8 % (v/v)	Remarks: The product is not explosive but the formation of explosive air/gas mixtures is possible.
Flash point	27 °C (80.6 °F)	
Auto-ignition temperature	450 °C (842 °F)	Substance: Hydrocarbons, C9, aromatics
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	Not available	
Density and/or relative density	1.36 ≤ x ≤ 1.44 g/cm^3	Temperature: 20 °C (68 °F)
Relative vapour density	Not available	

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

Explosive properties	The product is not explosive but the formation of explosive air/gas mixtures is possible.	
Total solids	0 %	Temperature: 250 °C (482 °F)
VOC (Directive 2010/75/EU)	12.50 % – 170 g/l	
Volatile carbon	11.94 % – 162 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.

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.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage
Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates
May form explosive mixtures with: air

10.4 Conditions to avoid

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

10.5 Incompatible materials

Information not available.

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

XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

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

XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

11.1.4 Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

11.1.5 ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture	> 20 mg/l
ATE (Oral) of the mixture	Not classified (no significant component)
ATE (Dermal) of the mixture	> 2,000 mg/kg

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral):	4,300 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	2,000 mg/kg	Species/guidelines: Rabbit
LC50 (Inhalation vapours):	26 mg/l	Exposure duration: 4 hours Species/guidelines: Rat
ATE (Inhalation - vapours)	11 mg/l	estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

Hydrocarbons, C9, aromatics

LD50 (Oral):	3,492 mg/kg	Species/guidelines: Rat
LD50 (Dermal):	3,160 mg/kg	Species/guidelines: Rabbit

11.1.6 SKIN CORROSION/IRRITATION

Does not meet the classification criteria for this hazard class

11.1.7 SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

11.1.8 RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

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

XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

11.1.11 REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

11.1.12 STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

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
Viscosity:

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.

12.1 Toxicity

XYLENE (MIXTURE OF ISOMERS)

LC50 - for Fish	2.6 mg/l	Exposure duration: 96 hours Species/guidelines: Oncorhynchus mykiss
EC50 - for Algae / Aquatic Plants	1.3 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata
Chronic NOEC for Fish	> 1.3 mg/l	Species/guidelines: Oncorhynchus mykiss

Hydrocarbons, C9, aromatics

LC50 - for Fish	9.2 mg/l	Exposure duration: 96 hours Species/guidelines: Onorhynchus mykiss
EC50 - for Algae / Aquatic Plants	2.9 mg/l	Exposure duration: 72 hours Species/guidelines: Pseudokirchneriella subcapitata

12.2 Persistence and degradability

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 ≤ x ≤ 1,000 mg/l	
Degradability	Rapidly degradable	

Hydrocarbons, C9, aromatics

Degradability	Rapidly degradable	

12.3 Bioaccumulative potential

XYLENE (MIXTURE OF ISOMERS)

Bioconcentration factor	25.9
Partition coefficient n-octanol/water	3.12 LogKow

12.4 Mobility in soil

XYLENE (MIXTURE OF ISOMERS)

Partition coefficient soil/water	2.73 LogKoc

Hydrocarbons, C9, aromatics

Partition coefficient soil/water	0.25 LogKoc

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 ≥ 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

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.

Directive 2008/98/EC (waste)
For the disposal of waste from this material, the hazard characteristics shall be assessed in accordance with Directive 2008/98/EC. Any transboundary shipment must comply with Regulation (EU) 2024/1157.

Hazardous waste classification - Reg. (UE) 1357/2014
HP 3 – Flammable
HP 5 – Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 14 – Ecotoxic

Section 14 Transport information

14.1 UN number or ID number

ADR / RID	IMDG	IATA
UN 1133	UN 1133	UN 1133

14.2 UN proper shipping name

ADR / RID	ADHESIVES
IMDG	ADHESIVES
IATA	ADHESIVES

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
III	III	III

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	30	Limited Quantities	5 L
Tunnel restriction code	(D/E)	Special provisions	
IMDG			
EmS	F-E, S-D	Limited Quantities	
IATA			
Maximum quantity (Cargo)	220 L	Packaging instructions (Cargo)	366
Maximum quantity (Passengers)	60 L	Packaging instructions (Passengers)	355
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	

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 ≥ 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

Notification Art. 45 CLP

The mixture may not have been notified in all EU Member States. In the event of resale in a country other than the one in which it was purchased, contact the supplier to verify any applicable obligations.

Regulation (EU) 2024/590 – Substances that deplete the ozone layer

Annex I. Contains:	Annex II. Contains:
None	None

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

WGK2 – Hazard to waters

Denmark - MAL code - Executive Order No. 301 of 13 May 1993

n.a.

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
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 3	Flammable liquid, category 3
Skin Irrit. 2	Skin irritation, category 2
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

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

Section 16

Legend

- 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
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

Section 16

General Bibliography

- 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

2 Hazards identification
2.2 Label elements
9 Physical and chemical properties
9.1 Information on basic physical and chemical properties
13 Disposal considerations
13.1 Waste treatment methods
15 Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture