Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 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

Code:	**4110022360**
Product name	**DESCALER FOR HULLS**
UFI :	**2HJ0-607E-V00U-M0JH**

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

Intended use **Liquid descaler for cleaning boat keels**

1.3. Details of the supplier of the safety data sheet

Name	**Meccanocar Italia S.r.l.**
Full address	**Via San Francesco, 22**
District and Country	**56033 Capannoli (PI)** **Italy**
	Tel. +39 0587 609433
	Fax +39 0587 607145
e-mail address of the competent person responsible for the Safety Data Sheet Supplier:	**moreno.meini@meccanocar.it**

1.4. Emergency telephone number

For urgent inquiries refer to **National Poisons Information Service: +44 121 507 4123**

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 and indication:

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
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 words: Danger

Hazard statements:

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

EUH071 Corrosive to the respiratory tract.

Precautionary statements:

P260 Do not breathe vapours.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P280 Wear protective gloves/ protective clothing / eye protection / face protection.

P304+P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.

P501 Dispose of contents / container in accordance with local regulations.

Contains: PHOSPHORIC ACID
HYDROCHLORIC ACID

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%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
PHOSPHORIC ACID		
INDEX 015-011-00-6	18 ≤ x < 20	Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B
EC 231-633-2		Met. Corr. 1 H290: ≥ 20%, Skin Corr. 1B H314: ≥ 25%, Skin Irrit. 2 H315: ≥ 10%, Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 10%
CAS 7664-38-2		STA Oral: 500 mg/kg
REACH Reg. 01-2119485924-24-XXXX		
HYDROCHLORIC ACID		
INDEX 017-002-01-X	13,5 ≤ x < 15	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: B
EC 231-595-7		Skin Corr. 1B H314: ≥ 25%, Skin Irrit. 2 H315: ≥ 10%, Eye Dam. 1 H318: ≥ 25%, Eye Irrit. 2 H319: ≥ 10%, STOT SE 3 H335: ≥ 10%
CAS 7647-01-0		
REACH Reg. 01-2119484862-27-XXXX		

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

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
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

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

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after 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 in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	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.
	TLV-ACGIH	ACGIH 2022

PHOSPHORIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	1		2		
VLEP	FRA	1	0,2	2	0,5	
VLEP	ITA	1		2		
RD	LTU	1		2		
TLV	NOR	1				
VLE	PRT	1		2		
NDS/NDSCh	POL	1		2		
WEL	GBR	1		2		
OEL	EU	1		2		
TLV-ACGIH		1		3		

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,1 mg/kg bw/d				
Inhalation			0,36 mg/m3	4,57 mg/m3	2 mg/m3		1 mg/m3	10,7 mg/m3

HYDROCHLORIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	7,6	5	15	10	
VLEP	FRA			7,6	5	
VLEP	ITA	8	5	15	10	
RD	LTU	8	5	15	10	
TLV	NOR	7		5 (C)		
VLE	PRT	8	5	15	10	

NDS/NDSCh	POL	5		10	
WEL	GBR	2	1	8	5
OEL	EU	8	5	15	10
TLV-ACGIH				2,9 (C)	2 (C)

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			8 mg/m3				8 mg/m3	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): 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.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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.

PHOSPHORIC ACID

Wear suitable gloves (neoprene gloves)

HYDROCHLORIC ACID

Hand protection:
Protective gloves must comply with EN 374.
Suitable glove material: fluorine rubber, butyl rubber, chloroprene, nitrile rubber, PVC, latex.
The suitability of a specific glove from a supplier must be determined based on the conditions of use (chemical, mechanical, thermal stress and time of use / contact)
Eye and face protection:
Safety glasses with side protection or glasses compliant with EN 166.
Full face mask.

ALCOHOLS, C8-10, ETHOXYLATES

Suitable are protective gloves with the following specifications. The recommendation is valid for laboratory conditions, specific workplace conditions must be taken into consideration separately.
Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to> 480 minutes of breakthrough time according to EN 374):
natural rubber / natural latex (NR) - coating thickness 0.5 mm

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	Light yellov	
Odour	characteristic, pungent	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	
Auto-ignition temperature	not available	Not inflammable
Decomposition temperature	not available	
pH	0,5	
Kinematic viscosity	not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,113	
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

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

PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane.May react dangerously with: alkalis,sodium borohydride.

Exothermic reaction with water.
Reacts violently with strong alkalis.
In contact with reactive metals (such as steel, carbon and aluminum) it can produce hydrogen.
High temperature formation of phosphorus oxides.

HYDROCHLORIC ACID

Risk of explosion on contact with: alkaline metals,aluminium powder,hydrogen cyanide,alcohol.

The product reacts with:
- common construction metals with evolution of highly flammable hydrogen gas,
- alkaline and organic bases with violent evolution of heat,
- limestone, marble, dolomite and other carbonic minerals with the evolution of suffocating CO2 gas,
- strong oxidants (bleaching agents, conc. H2O2, HNO3, etc. and their salts, chromates, permanganates, etc.) with the evolution of toxic chlorine gas,
- sulphides with evolution of toxic H2S gas,
- sulphites, hydrogen sulphites and pyrosulphites with evolution of toxic SO2 gas,
- with highly toxic and explosive sodium azide to hydrazoic acid,
- any other chemical subject to (dangerous) reaction / decomposition with acids.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

PHOSPHORIC ACID

Incompatible with: metals,strong alkalis,aldehydes,organic sulphides,peroxides.

HYDROCHLORIC ACID

Incompatible with: alkalis,organic substances,strong oxidants,metals.

10.6. Hazardous decomposition products

PHOSPHORIC ACID

May develop: phosphoryl oxides.

HYDROCHLORIC ACID

In decomposition develops: hydrochloric acid fumes.

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

Corrosive to the respiratory tract.

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

PHOSPHORIC ACID

STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Corrosive for the skin

Classification according to the experimental Ph value

HYDROCHLORIC ACID
Method: OECD guideline for the testing of chemicals 431
Reliability: 1
Species: Human skin
Route of exposure: Dermal
Results: non corrosive

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Skin sensitization

HYDROCHLORIC ACID
Method: OECD Guideline 406
Reliability: 2
Species: guinea pig and female mouse
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID
Method: OECD 471 in vitro test
Reliability: 1
Species: S. typhimurium, E. Coli
Results: Negative with and without metabolic activation

HYDROCHLORIC ACID
Method: in vivo test
Reliability: 2
Species: Saccharomyces cerevisiae
Results: negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

HYDROCHLORIC ACID
Reliability: 2
Species: Rat (Sprague-Dawley; male)
Route of exposure: inhalation
Results: NOAEL <10 ppm

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

PHOSPHORIC ACID
Method: OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: Negative, NOAEL (fertility)> = 500 mg / kg bw / day

Adverse effects on development of the offspring

PHOSPHORIC ACID
Method: Equivalent or similar to OECD 414

Reliability: 2
Species: Mouse (CD-1)
Route of exposure: Oral
Results: Negative, NOAEL (development)> = 370 mg / kg bw / day

STOT - SINGLE EXPOSURE

May cause respiratory irritation

PHOSPHORIC ACID
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

HYDROCHLORIC ACID
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ALCOHOLS, C8-10, ETHOXYLATES
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID
Method: Not indicated
Reliability: 2
Species: Rat
Route of exposure: Oral
Results: Negative

HYDROCHLORIC ACID
Method: equivalent or similar to OECD Guideline 413
Reliability: 1
Species: Rat - Sprague-Dawley (CD); Rat - Fisher-344 (CDF) (male; female)
Route of exposure: Inhalation
Results: NOAEL 20 ppm

ALCOHOLS, C8-10, ETHOXYLATES
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

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

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

PHOSPHORIC ACID	
EC50 - for Crustacea	100 mg/l/48h
EC50 - for Algae / Aquatic Plants	100 mg/l/72h
EC10 for Algae / Aquatic Plants	100 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	100 mg/l
ALCOHOLS, C8-10, ETHOXYLATES	
EC50 - for Algae / Aquatic Plants	3,4 mg/l/72h

12.2. Persistence and degradability

ALCOHOLS, C8-10, ETHOXYLATES
Quickly biodegradable, 80-90% in 28 days.

PHOSPHORIC ACID	
Solubility in water	> 850000 mg/l
Degradability: information not available	
HYDROCHLORIC ACID	
Solubility in water	> 10000 mg/l
Degradability: information not available	

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

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

PHOSPHORIC ACID
The neutralized liquid can be poured in compliance with the normative legislation (the law regulates the emptying of waste water containing phosphorus).
The waste from the containers or the used container itself must be disposed of in accordance with local requirements.
Sodium carbonate, calcium carbonate and slaked lime (calcium hydroxide) can be used as neutralizing agents for the material
which cannot be eliminated.
If phosphoric acid is used in the reactions of aqueous solutions, rinse the drum three times with water.
Respect local regulations for disposal.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 3264

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8
IMDG: Class: 8 Label: 8
IATA: Class: 8 Label: 8

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special provision: 274		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 852
	Special provision:	A3, A803	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

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

Product

Point	3

Contained substance

Point	75

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

not applicable

Substances in Candidate List (Art. 59 REACH)

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)

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

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.

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:

Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- 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 as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- 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 as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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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
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8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
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16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
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22. Delegated Regulation (UE) 2022/692 (XVIII 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
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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.