Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **411 00 19900-6305**

Product name **DESCALER FOR ULTRASONIC TANKS**

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

Intended use **Metal degreaser**

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 **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 2015/830.
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:

Serious eye damage, category 1	H318	Causes serious eye damage.

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:

H318 Causes serious eye damage.

Precautionary statements:

P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER / doctor.

Contains: ALCOHOLS C9-11, ETHOXYLATES

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
ALCOHOLS C9-11, ETHOXYLATES CAS 68439-46-3 EC 614-482-0 INDEX -	21 ≤ x < 22,5	Eye Irrit. 2 H319
DIPROPYLENE GLYCOL MONOMETHYL ETHER CAS 34590-94-8 EC 252-104-2 INDEX - Reg. no. 01-2119450011-60-XXXX	4,5 ≤ x < 5	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

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists,

seek medical advice.
SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.
INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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. 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 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	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 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

ALCOHOLS C9-11, ETHOXYLATES

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,104	mg/l
Normal value in marine water	0,104	mg/l
Normal value for fresh water sediment	13,7	mg/kg
Normal value for marine water sediment	13,7	mg/kg
Normal value of STP microorganisms	1,4	mg/l
Normal value for the terrestrial compartment	1	mg/kg

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	25 mg/kg bw/d		
Inhalation	87 mg/m3		294 mg/m3
Skin	1250 mg/kg bw/d		2080 mg/kg bw/d

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	308	50			SKIN
VLEP	FRA	308	50			SKIN
WEL	GBR	308	50			SKIN
VLEP	ITA	308	50			SKIN
TLV	NOR	300	50			SKIN
VLE	PRT	308	50			SKIN
OEL	EU	308	50			SKIN
TLV-ACGIH		606	100	909	150	SKIN

Predicted no-effect concentration - PNEC		
Normal value in fresh water	19	mg/l
Normal value in marine water	1,9	mg/l
Normal value for fresh water sediment	70,2	mg/kg
Normal value for marine water sediment	7,02	mg/kg
Normal value of STP microorganisms	4168	mg/l
Normal value for the terrestrial compartment	2,74	mg/kg

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				36 mg/kg bw/d				
Inhalation				37,2 mg/m3				308 mg/m3
Skin				121 mg/kg bw/d				283 mg/kg bw/d

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.

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 (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.

SKIN PROTECTION
Wear category I 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.

ALCOHOLS C9-11, ETHOXYLATES

Chemical resistant protective gloves (EN 374)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding> 480 minutes of permeation time according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Use chemical resistant gloves classified according to EN374: protective gloves against chemicals and microorganisms. Examples of preferred barrier material for gloves include: Butyl rubber. Polyethylene laminate / vinyl ethyl alcohol ("PE / EVAL"). Examples of acceptable barrier materials for gloves include: Natural rubber ("latex"). Neoprene. Nitrile / butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). In the event of prolonged or frequently repeated contact, a glove with a protection class of 5 or higher is recommended (breakthrough time greater than 240 minutes according to EN 374). When only brief contact is expected, a glove with a protection class of 1 or more is recommended (breakthrough time greater than 10 minutes according to EN 374). NOTICE: selection of a specific glove for a particular application and duration of use in a work environment should also take into account all relevant factors in the workplace such as, but not limited to: Other chemicals that can be handled , physical requirements (cut / puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as instructions / specifications provided by the glove supplier.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	yellow
Odour	characteristic
Odour threshold	Not available

pH	8,6
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,035 Kg/l
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

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.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Forms peroxides with: air.

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.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

May react violently with: strong oxidising agents.

10.4. Conditions to avoid

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

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Avoid exposure to: sources of heat.Possibility of explosion.

Do not distill to dryness. The product can oxidize at high temperatures. The generation of gas during decomposition can cause pressure in closed systems.

10.5. Incompatible materials

ALCOHOLS C9-11, ETHOXYLATES

Acids, alkalines, caustics, halogens, reactive chemicals.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Avoid contact with: strong acids. Strong bases. Strong oxidants.

10.6. Hazardous decomposition products

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Decomposition products depend on temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)

ALCOHOLS C9-11, ETHOXYLATES

Method: Equivalent or similar to OECD 401
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: LD50 = 3488 mg / kg bw

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: Equivalent or similar to OECD 401
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50> 5000 mg / kg bw
Method: Equivalent or similar to OECD 403
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: LC0> 275 ppm
Method: Equivalent or similar to OECD 402
Reliability: 2
Species: Rabbit (New Zealand White; male)
Route of exposure: Dermal
Results: LD50 = 10 mL7kg bw

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: Equivalent or similar to OECD 404
Reliability: 2
Species: Rabbit
Route of exposure: Dermal
Results: Not irritating

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: Not indicated
Reliability: 2
Human species
Route of exposure: Ocular
Results: Not irritating
Bibliographic reference: Local Ophthalmic Effects of Dipropylene Glycol Monomethyl Ether, Balantyne, B. (1984)

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Skin sensitization
ALCOHOLS C9-11, ETHOXYLATES

Method: Equivalent or similar to OECD 406
Reliability: 2
Species: guinea pig (Variety of the breeding unit 'P'; male / female)
Route of exposure: Dermal
Results: Not sensitizing

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: Not indicated
Reliability: 2
Species: Human (male / female)
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

ALCOHOLS C9-11, ETHOXYLATES

Method: OECD 471-in vitro test-Read across
Reliability: 2
Species: S. typhimurium
Results: Negative with and without metabolic activation

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 1
Species: S. typhimurium
Results: Negative with and without metabolic activation

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: OECD 453-Read across
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapors)
Results: NOEL = 300 ppm

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility
ALCOHOLS C9-11, ETHOXYLATES

Method: Equivalent or similar to OECD 416
Reliability: 2
Species: Rat (Fischer 344; male / female)
Route of exposure: Dermal
Results: NOAEL (fertility)> = 250 mg / kg bw / day

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: OECD 416-Read across
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEL (fertility) = 300 ppm

Adverse effects on development of the offspring
ALCOHOLS C9-11, ETHOXYLATES

Method: Equivalent or similar to OECD 416
Reliability: 2
Species: Rat (Fischer 344)
Route of exposure: Dermal
Results: NOAEL (development)> = 250 mg / kg bw / day

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: EPA OTS 798.4350
Reliability: 1
Species: Rat (Fischer 344)
Route of exposure: Inhalation
Results: NOAEL (development) = 300 ppm

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

ALCOHOLS C9-11, ETHOXYLATES

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

DIPROPYLENE GLYCOL MONOMETHYL ETHER

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

ALCOHOLS C9-11, ETHOXYLATES

Method: Equivalent or similar to OECD 408-Read across
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: NOAEL> = 500 mg / kg bw / day

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Method: KANPOGYO No. 700, YAKUHATSU No. 1039.61, and KIKYKU No. 1014.

Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: NOAEL = 1000 mg / kg bw / day
Method: Equivalent or similar to OECD 413
Reliability: 2
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEL = 200 ppm
Method: Equivalent or similar to OECD 411
Reliability: 2
Species: Rabbit (male)
Route of exposure: Dermal
Results: NOAEL = 2850 mg / kg bw / day

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

DIPROPYLENE GLYCOL MONOMETHYL ETHER	
EC50 - for Crustacea	1919 mg/l/48h
EC10 for Algae / Aquatic Plants	1000 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	1000 mg/l

12.2. Persistence and degradability

ALCOHOLS C9-11, ETHOXYLATES
Easily degradable in water, 71-100% in 28 days.
DIPROPYLENE GLYCOL MONOMETHYL ETHER
Easily degradable in water, 79% in 28 days.

DIPROPYLENE GLYCOL MONOMETHYL ETHER	
Solubility in water	1000 - 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

DIPROPYLENE GLYCOL MONOMETHYL ETHER	
Partition coefficient: n-octanol/water	0,0043

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 greater than 0,1%.

12.6. 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.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

ALCOHOLS C9-11, ETHOXYLATES
They must be disposed of or incinerated in accordance with local regulations.

DIPROPYLENE GLYCOL MONOMETHYL ETHER
Any disposal practice must comply with all local and national laws and regulations. Do not discharge into sewers, onto the ground or into any body of water.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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/EC: None

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

Product
Point 3

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 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:

Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- 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) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 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) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII 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.
Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.
The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:
The following sections were modified:
01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.