Safety Data Sheet

Complies with Annex II of REACH - Regulation (EU) 2020/878

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

1.1. Product identifier

Code:	**YCH0001**
Denomination	**DIAMOND BOAT**
Chemical name and synonyms	**DIAMOND BOAT**

1.2. Relevant identified uses of the substance or mixture and discouraged uses

Area of use	**SU22 – Professional Uses SU21- Consumer Uses**
Product Category	**PC35 – Washing and cleaning products (including solvent-based products)**
Description/Use	**Multipurpose cleaner for the marine sector**

1.3. Information on the safety data sheet provider

Name	**MARBEC S.R.L.**
Address	**VIA CROCE ROSSA 5/i**
Location and State	**51037 MONTALE (PISTOIA)** **ITALY**
	tel. +039 0573/959848
	fax
e-mail address of the competent person,	
Safety Data Sheet Manager	**info@marbec.it**

1.4. Emergency telephone number

For urgent information, please contact

MARBEC srl
0573959848 8.30 a.m.-1 p.m. 2 p.m.-6 p.m. or 3348578502
Telephone number for Poison Control Centres available 24 hours a day
IRCSS Fondazione Maugeri –
Pavia 0039-0382-24444
CAV Ospedali Riuniti –
Bergamo 0039-800-883300
CAV Ospedale Niguarda Ca` Granda –
Milano 0039-02-66101029
CAV Ospedale Careggi- Firenze 0039-055-7947819
CAV Policlinico Gemelli –
Roma 0039-06-3054343
CAV Policlinico Umberto I –
Roma 0039-06 49978000
CAV Ospedale Cardarelli –
Napoli 0039-081 5453333
CAV Azienda Ospedaliera Integrata Verona - Verona 800011858

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adaptations).
The product therefore requires a safety data sheet that complies with the provisions of Regulation (EU) 2020/878.
Any additional information regarding risks to health and/or the environment is reported in sections 11 and 12 of this sheet.

Classification and hazard statements:

Eye irritation, category 2	H319	It causes severe eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.

2.2. Label elements

Hazard labelling in accordance with Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adaptations.

Hazard pictograms:

Warnings: Attention

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.

Precautionary statements:

P280	Wear protective gloves/protective clothing/eye protection/face protection
P337+P313	If eye irritation persists: Get medical advice/ attention.
P302+P352	IF ON SKIN: Wash with plenty of water/…
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.

Ingredients compliant with Regulation (EC) No. 648/2004

Nonionic surfactants <5%, anionic surfactants <5%, fragrance (D-Limonene, Linalool, Hexyl cinnamal).

Product not intended for uses under Directive 2004/42/EC.

2.3. Other hazards

Based on the available data, the product does not contain PBT or vPvB substances in a percentage ≥ to 0.1%.

The product does not contain endocrine-disrupting substances in a concentration ≥ 0.1%.

SECTION 3. Composition/ingredient information

3.2. Mixtures

Contains:

Identification	Conc. %	Classification 1272/2008 (CLP)
DIPROPYLENE GLYCOL MONOMETHYL ETHER		
CAS 34590-94-8	1 ≤ x < 5	Substance with a Community limit of exposure in the workplace.
EC 252-104-2		
INDEX -		
Reg. REACH 01-2119450011-60-xxxx		
3-BUTOXY-2-PROPANOL		
CAS 5131-66-8	2 ≤ x < 3.5	Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315
CE 225-878-4		
INDEX 603-052-00-8		
Reg. REACH 01-2119475527-28-xxxx		
3-methoxy-3-methyl-1-butanol		
CAS 56539-66-3	1 ≤ x < 3	Eye Irritates. 2 H319
CE 260-252-4		
INDEX -		
Reg. REACH 01-2119976333-33-xxxx		
ETHANOLAMINE		
CAS 141-43-5	1 ≤ x < 1.5	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335 STOT SE 3 H335: ≥ 5%
CE 205-483-3		
INDEX 603-030-00-8		LD50 Oral: 1515 mg/kg, STA Cutaneous: 1100 mg/kg, STA Vapor Inhalation: 11 mg/l
Reg. REACH 01-2119486455-28		
C6 Alkylglycosides		
CAS 54549-24-5	1 ≤ x < 1.5	Eye Dam. 1 H318
EC 259-217-6		
INDEX -		
Reg. REACH 01-2119492545-29		

The full text of the hazard statements (H) can be found in section 16 of the data sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Discard any contact lenses. Wash immediately and abundantly with water for at least 30/60 minutes, opening the eyelids well. Seek medical attention immediately.

SKIN: To take off contaminated clothes. Take a shower immediately. Seek medical attention immediately.

INGESTION: Drink as much water as possible. Seek medical attention immediately. Do not induce vomiting unless expressly authorized by your doctor.

The
BIRTH: Call a doctor immediately. Take the subject to fresh air, away from the accident site. If breathing stops, practice artificial respiration. Take proper precautions for the rescuer.

4.2. Main symptoms and effects, both acute and delayed

No specific information is known about the symptoms and effects caused by the product.

4.3. Indication of the need for immediate medical advice and special treatment

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing means

SUITABLE EXTINGUISHING MEANS
Choose the most appropriate extinguishing means for the specific situation.

UNSUITABLE MEANS OF EXTINGUISHING
No one in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE
The product is not flammable or combustible.

5.3. Recommendations for firefighters

EQUIPMENT
Normal firefighting clothing, such as an open-circuit compressed air breathing apparatus (EN 137), flame-retardant suit (EN469), flame-retardant gloves (EN 659) and firefighter boots (HO A29 or A30).

SECTION 6. Measures in the event of accidental release

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Remove any source of ignition (cigarettes, flames, sparks, etc.) or heat from the area where the leak occurred. Remove unequipped people. Wear gloves/protective clothing/eye protection/face.

6.2. Environmental precautions

Prevent leakage into the environment.

6.3. Methods and materials for containment and remediation

Absorb the spilled product with inert absorbent material. Provide sufficient ventilation of the place affected by the leak. Disposal of contaminated material shall be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal can be found in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid the accumulation of electrostatic charges. Do not spray on flames or hot objects. Vapours can ignite by explosion, so they should be avoided by keeping doors and windows open and ensuring cross-ventilation. Do not eat, drink, or smoke during use. Do not breathe aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place, away from direct sunlight and at a temperature below 50°C / 122°F, away from any source of combustion.

Storage class TRGS 510 (Germany):
12

7.3. Special end-uses

Information not available

SECTION 8. Exposure/Personal Protection Controls

8.1. Control parameters

Regulatory references:

DEU	Germany	Technical Rules for Hazardous Substances (TRGS 900) - List of Occupational Exposure Limits and Short-Term Values. List of MAK and BAT Values 2020, Permanent Senate Commission for the Examination of Hazardous Substances, Communication 56
Extrasensory perception	España	Occupational exposure limits for chemical agents in Spain 2021
BETWEEN	France	Limit values for occupational exposure to chemical agents in France. ED 984 - INRS
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Decree-Law No. 1/2021 of 6 January, indicative occupational exposure limit values for chemical agents. Decree-Law No. 35/2020 of 13 July, protection of workers against the risks related to exposure at work to carcinogens or mutagens
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
HAD	OEL EU	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 2021

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Threshold limit value

Guy	State	TWA/8h		STEL/15min		Notes / Remarks
		mg/m3	ppm	mg/m3	ppm	
AGW	GAVE	310	50	310	50	
MAK	GAVE	310	50	310	50	
VLA	ESP	308	50			SKIN
VLEP	FROM	308	50			SKIN
VLEP	ITA	308	50			SKIN
WANT	PRT	308	50			SKIN
WELL	GBR	308	50			SKIN
OIL	HAD	308	50			SKIN

3-BUTOXY-2-PROPANOL

Predicted concentration of no effect on the environment - NECP		
Reference value in fresh water	0,525	mg/l
Reference value in seawater	0,0525	mg/l
Reference value for freshwater sediment	2,36	mg/kg
Reference value for sediment in seawater	0,236	mg/kg
Water reference value, intermittent release	5,25	mg/l
Reference value for STP microorganisms	10	mg/l
Reference value for the land compartment	0,16	mg/kg

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic
Oral				8.75 mg/kg bw/d				
Inhalation				33.8 mg/m3				270.5 mg/m3
Dermal				16 mg/kg bw/d				44 mg/kg bw/d

3-methoxy-3-methyl-1-butanol

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic
Oral				2.5 mg/kg BW/D				
Inhalation				4.4 mg/m3				18 mg/m3
Dermal				3.1 mg/kg bw/d				6.25 mg/kg bw/d

ETHANOLAMINE

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Remarks
		mg/m3	ppm	mg/m3	ppm	
AGW	GAVE	0,5	0,2	0,5	0,2	SKIN
MAK	GAVE	0,51	0,2	0,51	0,2	
VLA	ESP	2,5	1	7,5	3	SKIN
VLEP	FROM	2,5	1	7,6	3	SKIN
VLEP	ITA	2,5	1	7,6	3	SKIN
WANT	PRT	2,5	1	7,6	3	SKIN
WELL	GBR	2,5	1	7,6	3	SKIN
OIL	HAD	2,5	1	7,6	3	SKIN
TLV-ACGIH		7,5	3	15	6	

Predicted concentration of no effect on the environment - NECP		
Reference value in fresh water	0,085	mg/L
Reference value in seawater	0,0085	mg/L
Reference value for freshwater sediment	0,425	mg/kg
Reference value for sediment in seawater	0,0425	mg/kg
Water reference value, intermittent release	0,025	mg/l
Reference value for STP microorganisms	100	mg/l

Reference value for the land compartment	0,035	mg/kg

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic
Oral				3.75 mg/kg/d				
Inhalation			2 mg/m3				3.3 mg/m3	
Dermal				0.24 mg/kg/d				1 mg/kg/d

C6 Alkylglycosides

Predicted concentration of no effect on the environment - NECP		
Reference value in fresh water	0,1	mg/l
Reference value in seawater	0,01	mg/l
Reference value for freshwater sediment	0,41	mg/kg
Reference value for sediment in seawater	0,041	mg/kg
Reference value for STP microorganisms	100	mg/l
Reference value for the land compartment	0,654	mg/kg

Health - Derived Level of No-Effect - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exhibition Street	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic	Acute rooms	Acute systemic	Chronic Premises	Chronic systemic
Oral	VND	35.7 mg/kg bw/d						
Inhalation			VND	124 mg/m3			VND	420 mg/m3
Dermal			VND	357000 mg/kg BW/D			VND	595000 mg/kg BW/D

Legend:

(C) = CEILING ; INALAB = Inhalable fraction; RESPIR = respirable fraction; TORAC = Thoracic fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no expected exposure; NPI = no hazard identified.

8.2. Exposure Controls

Considering that the use of appropriate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace by means of effective local suction.
When choosing personal protective equipment, seek advice from your chemical suppliers if necessary.
Personal protective equipment must bear the CE marking certifying its compliance with current standards.

Provide emergency showers with visocular basin.

HAND PROTECTION
If prolonged contact with the product is expected, it is advisable to protect the hands with penetration-resistant work gloves (ref. EN 374 standard).

SKIN PROTECTION
Personal skin protection is usually not necessary. Skin protection required for: splashing, skin contact, spray application
If necessary, wear long-sleeved work clothes and safety footwear for professional use of category I (ref. Directive 89/686/EEC and EN ISO 20344 standard).
Wash with soap and water after removing protective clothing.
EYE PROTECTION
It is recommended to wear airtight protective goggles (ref. EN 166 standard).

RESPIRATORY PROTECTION

Not required for normal use.
In case of exceeding the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product, it is recommended to wear a mask with a type A filter whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref. EN 14387 standard). If gases or vapours of a different nature and/or gases or vapours with particles (aerosols, fumes, mists, etc.) are present, combined filters must be provided.
The use of respiratory protective equipment is necessary if the technical measures adopted are not sufficient to limit the worker's exposure to the threshold values taken into consideration. The protection offered by masks is limited, however.
In the event that the substance in question is odourless or its odour threshold is higher than the relevant TLV-TWA and in an emergency, wear an open-circuit compressed air breathing apparatus (ref. EN 137 standard) or an external air intake respirator (ref. EN 138 standard). For the correct choice of respiratory protective device, refer to EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
Emissions from production processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on fundamental physical and chemical properties

Property	Value	Information
Physical State	liquid	
Color	rose	
Smell	characteristic	
Melting or freezing point	Not applicable	
Initial boiling point	Unavailable	
Boiling range	Not applicable	
Inflammability	fireproof	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	> 90 °C	
Auto-ignition temperature	Not applicable	
ph	11	
Kinematic viscosity	Unavailable	
Solubility	Water soluble	
Partition coefficient: n-octanol/water	Unavailable	
Vapour pressure	Unavailable	
Density and/or Relative Density	1,004 kg/lt	
Relative vapor density	Unavailable	
Particle characteristics	Not applicable	

9.2. Other information

9.2.1. Information on classes of physical hazards

Information not available

9.2.2. Other security features

VOC (Directive 2010/75/EU)	8.02 % - 80.50 g/litre
Explosive properties	Not applicable
Oxidizing properties	Not applicable

SECTION 10. Stability and responsiveness

10.1. Responsiveness

There is no particular danger of reaction with other substances under normal conditions of use.

10.2. Chemical Stability

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

10.3. Possibility of dangerous reactions

Under normal use and storage, no hazardous reactions are to be expected.

10.4. Conditions to be avoided

None in particular. However, follow the usual caution with regard to chemicals.

10.5. Incompatible Materials

Information not available.

10.6. Hazardous decomposition products

Information not available.

SECTION 11. Toxicological information

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

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on probable routes of exposure

Information not available

Immediate, delayed and chronic effects from short- and long-term exposures

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Cutaneous) of the mixture:	>2000 mg/kg

3-BUTOXY-2-PROPANOL

LD50 (Cutaneous):	> 2000 mg/kg Rat
LD50 (Oral):	3300 mg/kg Rat

3-methoxy-3-methyl-1-butanol

LD50 (Cutaneous):	> 2000 mg/kg Rat
LD50 (Oral):	4400 mg/kg Female rat

ETHANOLAMINE

LD50 (Cutaneous):	2504 mg/kg rat
STA (Cutaneous):	1100 mg/kg estimated from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimation of the acute toxicity of the mixture)
LD50 (Oral):	1515 mg/kg rat
LC50 (Vapor Inhalation):	1.48 mg/l/4h rat
STA (Vapor Inhalation):	11 mg/l estimate from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimation of the acute toxicity of the mixture)

SKIN CORROSION / SKIN IRRITATION

Causes skin irritation

SEVERE EYE DAMAGE/EYE IRRITATION

Causes severe eye irritation

RESPIRATORY OR SKIN SENSITIZATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Harmful effects on sexual function and fertility

Information not available

Harmful effects on the development of offspring

Information not available

Effects on or through lactation

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

DANGER IN CASE OF SUCTION

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 any substances listed in the main European lists of potential or suspected endocrine disruptors with effects on human health under evaluation.

SECTION 12. Ecological information

12.1. Toxicity

ETHANOLAMINE	
LC50 - Fish	349 mg/l/96h Cyprinus carpio
EC50 - Crustaceans	65 mg/l/48h daphnia magna

EC50 - Algae / Aquatic Plants	2,5 mg/l/72h pseudokirchneriella subcapitata

C6 Alkylglycosides

LC50 - Fish	> 100 mg/l/96h Oncorhynchus mykiss (rainbow trout)
EC50 - Crustaceans	> 100 mg/l/48h Daphnia magna
EC50 - Algae / Aquatic Plants	> 100 mg/l/72h Scenedesmus quadricauda

3-methoxy-3-methyl-1-butanol

LC50 - Fish	> 100 mg/l/96h Oryzias latipes
EC50 - Crustaceans	> 1000 mg/l/48h Daphnia Magna
EC50 - Algae / Aquatic Plants	> 1000 mg/l/72h Raphidocelis subcapitata

12.2. Persistence and degradability

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Water solubility	1000 - 10000 mg/l

Quickly degradable

3-BUTOXY-2-PROPANOL

Water solubility	52000 mg/l

Quickly degradable

ETHANOLAMINE

Water solubility	1000 - 10000 mg/l

Quickly degradable

C6 Alkylglycosides

Quickly degradable

3-methoxy-3-methyl-1-butanol

Quickly degradable

12.3. Bioaccumulation potential

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Partition coefficient: n-octanol/water	0,0043

3-BUTOXY-2-PROPANOL

Partition coefficient: n-octanol/water	1,2

ETHANOLAMINE

Partition coefficient: n-octanol/water	-2,3

3-methoxy-3-methyl-1-butanol

Partition coefficient: n-octanol/water 0,18

12.4. Mobility in soil

ETHANOLAMINE
Coefficient of distribution: soil/water -0,5646

12.5. Results of the PBT and vPvB assessment

Based on the available data, the product does not contain PBT or vPvB substances in a percentage ≥ to 0.1%.

12.6. Endocrine Disrupting Properties

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

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, if possible. Product residues are to be considered hazardous special waste. The hazardousness of waste containing part of this product must be assessed in accordance with the applicable legal provisions.
Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local legislation.

CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transportation Information

The product is not to be considered dangerous under the current regulations on the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN number or ID number

Not applicable

14.2. Official UN transport designation

Not applicable

14.3. Transport hazard classes

Not applicable

14.4. Packaging group

Not applicable

14.5. Hazards to the environment

Not applicable

14.6. Special precautions for users

Not applicable

14.7. Bulk shipping in accordance with IMO acts

Information not applicable

SECTION 15. Regulatory Information

15.1. Laws and regulations on health, safety and the environment specific to the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions on the product or substances contained in Annex XVII Regulation (EC) 1907/2006

Product

Point	3 - 40

Substances

Point	75

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

Not applicable

Sostanze in Candidate List (Art. 59 REACH)

Based on the available data, the product does not contain SVHC substances in a percentage ≥ to 0.1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to export notification Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Health Checks

Workers exposed to this chemical agent dangerous to health must be subjected to health surveillance carried out in accordance with the provisions of art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2. Chemical Safety Assessment

A chemical safety assessment has been developed for the following substances contained in the mixture:
3-Butoxy 2-Propanol, 3-methoxy-3-methyl-1-butanol, Ethanolamine.

SECTION 16. Other information

Text of the hazard statements (H) mentioned in sections 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye injuries, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific Target Organ Toxicity - Single Exposure, Category 3
H226	Flammable liquid and vapors.
H302	Harmful was ingested.
H312	Harmful by skin contact.
H332	The night was intruding.
H314	It causes severe skin burns and serious eye damage.
H318	It causes serious eye damage.
H319	It causes severe eye irritation.
H315	Causes skin irritation.

H335 It can irritate the respiratory tract.

LEGEND:
- ADR: European Agreement for the Carriage of Dangerous Goods by Road
- CAS: Chemical Abstract Service Number
- EC: Identification number in ESIS (European Repository of Existing Substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived level with no effect
- EC50: Concentration that affects 50% of the population being tested
- EmS: Emergency Schedule
- GHS: Global Harmonized System for the Classification and Labelling of Chemicals
- IATA DGR: Regulations for the Carriage of Dangerous Goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the test population
- IMDG: International Maritime Code for the Transport of Dangerous Goods
- IMO: International Maritime Organization
- INDEX: Identification number in Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable no-effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulations for the International Carriage of Dangerous Goods by Train
- STA: Acute Toxicity Estimation
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that must not be exceeded during any time of occupational exposure.
- TWA: Weighted Average Exposure Limit
- TWA STEL: Short-Term Exposure Limit
- VOC: Volatile Organic Compound
- vPvB: Very persistent and very bioaccumulative according to REACH
- WGK: Aquatic hazard class (Germany).

GENERAL BIBLIOGRAPHY:
1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 2020/878 (Annex II REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
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 (EU) 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)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Toxicological sheet
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note to the user:
The information contained in this sheet is based on the knowledge available to us at the date of the last version. The user must ensure that the information is suitable and complete in relation to the specific use of the product.
This document should not be construed as a guarantee of any specific property of the product.
Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force on hygiene and safety under their own responsibility. They do not accept responsibility for improper use.
Provide adequate training to personnel involved in the use of chemical products.
CLASSIFICATION CALCULATION METHODS
Chemical and physical hazards: The classification of the product has been derived from the criteria established by the CLP Regulation Annex I Part 2. The methods for evaluating the chemical and physical properties are given in section 9.
Health hazards: The classification of the product is based on the calculation methods set out in Annex I of CLP Part 3, unless otherwise indicated in section 11.
Environmental hazards: The classification of the product is based on the calculation methods set out in Annex I of CLP Part 4, unless otherwise indicated in section 12.

Changes from previous revision
Changes have been made to the following sections:
03 / 08 / 10 / 11 / 12.