Safety Data Sheet

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

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

1.1. Product identifier

Code:	**0005882**
Name	**OIL WET**
Chemical name and synonyms	**OIL WET**

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

Sector of use	**SU22 – Professional uses SU21-Consumer uses**
Description/Use	**Protector for absorbent stone materials**
UFI	**E300-F06G-D002-AGDR**

1.3. Details of the supplier of the safety data sheet

Company Name	**MARBEC SRL**
Address	**RED CROSS STREET 5/i**
Location and State	**51037 MONTALE (PISTOIA)** **ITALY**
	tel. +039 0573/959848
	fax
e-mail of the competent person, responsible for the safety data sheet	**info@marbec.it**

1.4. Emergency telephone number

For urgent information please contact

MARBEC srl
0573959848 8.30am - 1pm 2pm - 6pm or 3357267921
Telephone number of Poison Control Centers active 24/7
National Poisons Information Service (Birmingham Unit) +44 844 892 0111

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as dangerous according to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments).
The product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2020/878.
Any additional information regarding health and/or environmental risks is given in sections 11 and 12 of this sheet.

Classification and hazard statements:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Eye irritation, category 2	H319	Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms:

Warnings: Attention

Hazard statements:

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.

Precautionary advice:

P101	If medical advice is needed, have the product container or label available.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames or other ignition sources. No smoking.
P280	Wear protective gloves/clothing and eye/face protection.
P337+P313	If eye irritation persists, consult a doctor.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235	Store in a cool, well-ventilated place.

Product not intended for uses envisaged by Directive 2004/42/EC.

2.3. Other dangers

The product hydrolyzes to form methanol (CAS No. 67-56-1). Methanol is classified with respect to both physical and health hazards. The rate of hydrolysis and therefore also the relevance for the hazard of the product are highly dependent on the specific conditions.
Based on available data, the product does not contain PBT or vPvB substances in percentage ≥ 0.1%.

Endocrine disrupting properties – human health: The substance/mixture does not contain any components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Endocrine disrupting properties – environment: The substance/mixture does not contain any components considered to have endocrine disrupting properties according to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3. Composition/information on ingredients

3.2. Mixtures
modified polysiloxane

Contains:

Identification	**x = Conc . %**	**Classification 1272/2008 (CLP)**

titanotetrabutanolate
CAS 5593-70-4 — 1 ≤ x < 3 — Flam . Liq . 3 H226, Eye Dam. 1 H318, Skin Irrit . 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC 227-006-8
INDEX -
INHA [1] Num . REACH: 01-2119967423-33

METHANOL
CAS 67-56-1 — 0.5 ≤ x < 1 — Flam . Liq . 2 H225, Acute Tox . 3 H301, Acute Tox . 3 H311, Acute Tox . 3 H331, STOT SE 1 H370
EC 200-659-6 — specific concentration limits : >= 10 %: STOT SE 1 / H370 3 - < 10 %: STOT SE 2 / H371
INDEX 603-001-00-X — STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l, STA Inhalation mists/dusts: 0.501 mg/l
VERU [1], [2]

Type: INHA: ingredient, VERU: impurity Substances registered under REACH may be contained as impurities. These generally do not require the indication of identified uses and exposure scenarios in the safety data sheet. [1] = Substance harmful to human health or the environment; [2] = Substance with a Community workplace exposure limit; [3] = PBT substance; [4] = vPvB substance ; [5] = Endocrine disrupting properties *Classification information is given in chapter 16. This product does not contain substances of very high concern (REACH Regulation (EC) No 1907/2006, Article 57) ≥ 0.1%

The full text of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately with plenty of water for at least 15 minutes, holding the eyelids wide open. Consult a doctor if the problem persists.

SKIN: Remove contaminated clothing. Shower immediately. Call a doctor immediately. Wash contaminated clothing before reuse.

INHALATION: Remove the person to fresh air. If breathing stops, perform artificial respiration. Call a physician immediately.

INGESTION: Call a doctor immediately. Do not induce vomiting. Do not give anything that is not expressly authorized by your doctor.

4.2. Main symptoms and effects, both acute and delayed

There is no specific information available on symptoms and effects caused by the product.

4.3. Indication of any need to immediately consult a doctor and require special treatment

Methanol (CAS 67-56-1) is rapidly and well absorbed by all routes of exposure and is toxic regardless of the dose. Methanol may cause irritation of the mucous membranes, nausea, vomiting, headache, dizziness and visual disturbances, as well as blindness (irreversible damage to the optic nerve), acidosis, muscle cramps and coma. Delays in the onset of these effects may occur following exposure. Please note the additional information on toxicology in paragraph 11.

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEANS
The extinguishing means are the traditional ones: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING MEANS
Water jet

5.2. Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN CASE OF FIRE
In case of fire, formation of dangerous fumes and gases is possible. Exposure to combustion products may be a health hazard! Dangerous products in case of fire: toxic and very toxic fumes.

5.3. Recommendations for firefighters

EQUIPMENT
Use self-contained breathing apparatus. Keep people without protective equipment away.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Report the area. Wear personal protective equipment (see paragraph 8). Keep unprotected persons away.
devices . Avoid contact with eyes and skin. Do not breathe gas/vapours/ aerosols . In case of spillage of
material clearly indicate the danger of slipping. Do not walk through spilled material

6.2. Environmental precautions

Prevent the product from entering sewers, surface water or groundwater.

6.3. Methods and materials for containment and remediation

Remove mechanically and dispose of in accordance with regulations. Do not wash with water. In small quantities: Collect with neutral (non-alkaline/non-acidic) material suitable for absorbing liquids, e.g. diatomaceous earth, and dispose of in accordance with regulations. In large quantities: Liquids can be collected with suction devices or pumps. If flammable, use only pneumatic or standard electrical appliances. Remove any remaining slippery layer with detergent/soap solution or another biodegradable detergent. Silicone oils are slippery, spilled substances are therefore a safety hazard. To improve adhesion, spread sand or inert, granular material

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation of rooms and workplaces. Suction on the object is necessary. Spilled substance causes serious slipping hazard. Avoid formation of aerosols . In the event of formation of aerosols, special protective measures are necessary (suction, respiratory protection). Observe the instructions in paragraph 8. Keep away from incompatible substances referred to in point 10.

The product may release methanol. In closed environments, vapours may form mixtures with air, which in the presence of ignition sources cause explosions even inside empty, uncleaned containers. Keep away from ignition sources and do not smoke. Take precautions against electrostatic charges. Cool endangered containers with water.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Protect from moisture. Keep containers in a well-ventilated place.

Storage class TRGS 510 (Germany):
10

7.3. Specific end uses

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Germany	Technical Rules for Gefahrstoffe (TRGS 900) - List der Arbeitsplatzgrenzwerte und Kurzzeitwerte . MAK- und BAT- Werte -Liste 2020, Ständige Senate Commission back Testing health-related illness Working materials , Centre 56
ESP	Spain	Exposure limits professional for agents chemicals in Spain 2021
BETWEEN	France	Values limits of exhibition professional aux chemical agents in France. ED 984 - INRS
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Decree-Lei n.º 1/2021 of 6 January , values - exposure limit professional indicative for the ears agents chemicals . Decree-Lei n.º 35/2020 of 13 July , protection two workers against the collect linked to exposure during work with agents carcinogens or mutagenic
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	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

titanotetrabutanolate

Predicted no-effect concentration - PNEC		
Reference value in fresh water	0.08	mg /l
Reference value in sea water	0.008	mg /l
Reference value for sediments in fresh water	0.0687	mg /kg
Reference value for sediments in seawater	0.0069	mg /kg
Reference value for water, intermittent release	2.25	mg /l
Reference value for STP microorganisms	65	mg /l
Reference value for the terrestrial compartment	0.0168	mg /kg

Health - Derived No-Effect Level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Exposure Way	Sharp locals	Acute systemic	Chronic premises	Chronic systemic	Sharp locals	Acute systemic	Chronic premises	Chronic systemic
Oral				3.75 mg/kg bw /d				
Inhalation				38 mg/m3				127 mg/m3
Dermal				37.5 mg/kg bw /d				

METHANOL

Threshold limit value

Type	State	TWA/8h		STEL/15min		Notes / Observations	
		mg /m3	ppm	mg /m3	ppm		
AGW	DEU	270	200	1080	800	SKIN	
MAKE	DEU	130	100	260	200	SKIN	
VLA	ESP	266	200			SKIN	
VLEP	BETWEEN	260	200	1300	1000	SKIN	11
VLEP	ITA	260	200			SKIN	

VLE	PRT	260	200			SKIN
WELL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

Legend:

(C) = CEILING ; INALAB = Inhalable Fraction ; RESPIR = Respirable Fraction ; TORAC = Thoracic Fraction.

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 through effective local extraction.
When choosing personal protective equipment, seek advice from your chemical suppliers.
Personal protective equipment must bear the CE marking which certifies their compliance with current regulations.

Provide emergency shower with eye basin .

HAND PROTECTION
When handling this product, protective gloves in accordance with recognised standards such as EN374 must always be worn.

Recommended glove material:
Butyl Rubber Protective Gloves
Material thickness: > 0.5 mm
Breakthrough time: > 480 min

Recommended glove material:
Protective nitrile rubber gloves
Material thickness: > 0.4 mm
Breakthrough time: 10 - 30 min

Please observe the instructions regarding permeability and breakthrough time that are provided by the glove supplier.
Please also take into account the specific local conditions in which the product is used, such as the risk of cuts, abrasion and the duration of contact. It should be noted that in practice, due to the many influencing factors (e.g. temperature), the duration of daily use of a chemical-resistant protective glove may be considerably shorter than the permeation time determined by the tests.

SKIN PROTECTION
If handled outdoors: Chemical protective clothing, a full liquid-tight protective suit may be necessary if necessary. Please observe the supplier's instructions regarding permeability.

EYE PROTECTION
It is recommended to wear airtight protective glasses (ref. (EN 166 standard).

RESPIRATORY PROTECTION
inhalation exposure above the occupational limit value cannot be excluded , a system of
protection . Suitable respiratory equipment: Self-contained breathing apparatus, in accordance with standards
recognized as EN 137.
The time limit for use of respiratory devices as well as the instructions of the relevant manufacturer must be observed.

ENVIRONMENTAL EXPOSURE CONTROLS
Do not allow to enter water, waste water or soil

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value	Information
Physical State	liquid	
Color	colorless to yellowish	
Odor	characteristic	
Melting or freezing point	Not applicable	
Initial boiling point	180°C	
Flammability	Not available	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	40 °C	
Auto-ignition temperature	300°C	
pH	Not applicable	Reason for missing data: the substance/mixture is reactive with water
Kinematic viscosity	14 mm2/s at 25°C	
Solubility	insoluble in water	
Partition coefficient: n- octanol /water	Not available	
Vapor pressure	43 hPa / 20°C	
Density and/or Relative Density	1.03 kg/l	
Relative vapor density	Not available	
Particle Characteristics	Not applicable	

9.2. Other information

9.2.1. Information relating to physical hazard classes

Information not available

9.2.2. Other security features

Explosive properties	non -explosive
Oxidizing properties	non- oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular dangers 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 hazardous reactions

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Moisture, heat, open flames and other ignition sources .

10.5. Incompatible materials

It reacts with water, basic substances and acids. The reaction occurs with the formation of methanol

10.6. Hazardous decomposition products

With methanol hydrolysis. Tests show that at temperatures above 150°C, a small amount of formaldehyde is released by oxidative decomposition.

SECTION 11. Toxicological information

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

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

METHANOL
WORKERS: inhalation; skin contact.
POPULATION: ingestion of contaminated food or water; skin contact with products containing the substance.

Immediate, delayed and chronic effects resulting from short and long-term exposure

METHANOL
The minimum lethal dose for humans by ingestion is considered to be in the range of 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance can cause permanent blindness (IPCS) in adult humans.

Interactive effects

Information not available

ACUTE TOXICITY

For similar products, in animal testing, no indications of a specific danger for inhalation of aerosols were found. However, it is recommended to avoid inhalation of respirable aerosols.

Product data:

Exposure route	*Effect result*	*Species/test system*	*Source*
Inhalatory (aerosol)	CL50 > 240 ml/h; 4 h No mortality in highly enriched or saturated atmosphere at room	Rat	Conclusion by analogy

	temperature		

ATE (Oral) of the mixture: >2000 mg/kg
ATE (Cutaneous) of the mixture: >2000 mg/kg

POLYSILOXANES
LD50 (Dermal): > 2000 mg/kg rat
LD50 (Oral): > 5000 mg/kg rat

METHANOL

STA (Oral): 100 mg/kg estimate from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimate of the acute toxicity of the mixture)
STA (Cutaneous): 300 mg/kg estimate from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimate of the acute toxicity of the mixture)
STA (Inhalation of mists/dusts): 0.501 mg/l estimate from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimate of the acute toxicity of the mixture)
STA (Inhalation of vapors): 3 mg/l estimate from Table 3.1.2 of Annex I of CLP (data used for the calculation of the estimate of the acute toxicity of the mixture)

SKIN CORROSION / SKIN IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious 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

Adverse effects on sexual function and fertility

Information not available

Harmful effects on the development of offspring

Information not available

Effects on or through breastfeeding

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

Exposure route

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

Exposure route

Information not available

DANGER IN CASE OF ASPIRATION

Does not meet the classification criteria for this hazard class

11.2.1 Endocrine disrupting properties

The substance/mixture does not contain any components considered to have endocrine disrupting properties pursuant to Article 57(f) of REACH or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or above.

11.2.2 Information on other hazards

Hydrolysis product / impurity: methanol (CAS 67-56-1) is rapidly and well absorbed through all routes of exposure and is toxic regardless of the dose. Methanol can cause irritation of the mucous membranes, nausea, vomiting, headache, dizziness and visual disturbances, as well as blindness (irreversible damage to the optic nerve), acidosis, muscle cramps and coma. Delays in the onset of these effects may occur following exposure.

SECTION 12. Ecological information

12.1. Toxicity

POLYSILOXANES	
EC50 - Crustaceans	> 200 mg/l/48h Daphnia Magna
NOEC Chronic Fish	> 10000 mg/l fish

12.2. Persistence and degradability

POLYSILOXANES
NOT rapidly degradable

METHANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

Bioaccumulative potential

Unlikely biological accumulation.

METHANOL

Partition coefficient: n- octanol /water	-0.77
BCF	0.2

12.4. Mobility in soil

Silicone content: It is absorbed by suspended particles. Separation by sedimentation

vPvB assessment

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

12.6. Endocrine disrupting properties

Based on available data, the product does not contain 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

Recommendation: Material that cannot be reused, treated or recycled should be disposed of in a licensed facility in accordance with national, state and local regulations. Depending on regulations, waste treatment methods may include landfill or incineration.

CONTAMINATED PACKAGING
Empty packages must be clean (free of residues and condensation, cleaned with a spatula). The packages should preferably be reused in compliance with the local / national regulations in force. Packages that cannot be cleaned must be sent, like the substance, for disposal.

SECTION 14. Transport information

The product is not to be considered dangerous according to the current provisions regarding the transport of dangerous goods by road (ADR), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN number or ID number

Not applicable

14.2. UN official shipping name

Not applicable

14.3. Transport hazard classes

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for users

Road transport: No hazardous material of class 3 - ADR/RID 2.2.3.1.1 note 1 - the material does not sustain combustion!

Rail transport: No hazardous material of class 3 - ADR/RID 2.2.3.1.1 note 1 - the material does not sustain combustion!

Sea transport: No hazardous material of class 3 - IMDG 2.3.1.3 - the material does not sustain combustion!

Air transport: No hazardous material of class 3 - IATA 3.3.1.3 / ICAO 3.1.3 - the material does not sustain combustion!

For safety reasons, no air transport in intermediate bulk containers (IBC) or ventilated packaging!

Important information in other chapters should be noted.

14.7. Bulk maritime transport in accordance with IMO acts

Irrelevant information

SECTION 15. Regulatory Information

15.1. Legislative and regulatory provisions on health, safety and environment specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: P5c

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

Not applicable

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to export notification requirement 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 which is hazardous 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

The result of the safety assessment does not require the indication of exposure scenarios and uses in the safety data sheet.

SECTION 16. Other information

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

Flam . Liq . 2	Flammable liquid, category 2
Flam . Liq . 3	Flammable liquid, category 3
Acute Tox . 3	Acute toxicity, category 3
STOT SE 1	Specific target organ toxicity - single exposure, category 1
Eye Dam. 1	Serious eye damage, 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
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.

H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	It causes damage to organs.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May irritate respiratory tract.
H336	May cause drowsiness or dizziness.

LEGEND:
- ADR: European Agreement concerning the carriage of dangerous goods by road
Chemical Number Abstract Service
- CE: Identification number in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EC50: Concentration that produces an effect in 50% of the test population
- EmS : Emergency Schedule
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulations
- IC50: Immobilization concentration of 50% of the test population
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX: Identification number in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predicted Level of Exposure
- PNEC: Predicted 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 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 compound
- vPvB : Very Persistent and Very Bioaccumulative according to REACH
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:
1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament and of the Council (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
Chemical Handling Safety
- INRS - Fiche Toxicologique (toxicological sheets)
- Patty - Industrial Hygiene and Toxicology
- NI 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 for 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 the suitability and completeness of the information 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 is not under our direct control, it is the user's obligation to observe under his own responsibility the laws and provisions in force regarding hygiene and safety. We assume no responsibility for improper use.
Provide adequate training to personnel involved in the use of chemicals.
CLASSIFICATION CALCULATION METHODS
Chemical-physical hazards: The classification of the product was derived from the criteria established by the CLP Regulation Annex I Part 2. The methods for evaluating the chemical-physical properties are reported in section 9.
Health hazards: The classification of the product is based on the calculation methods 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 in Annex I of CLP Part 4, unless otherwise indicated in section 12.

Changes from the previous revision
Changes have been made to the following sections:
01/ 02 / 03 /15