

Safety Data Sheet

According to Annex II to REACH - Regulation 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: 0005882
Product name: OIL WET
Chemical name and synonym: OIL WET

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

Sector of use: SU22 – Professional uses
Intended use: Protective for absorbent stone materials

1.3. Details of the supplier of the safety data sheet

Name: MARBEC S.R.L.
Full address: VIA CROCE ROSSA 5/i
District and Country: 51037 MONTALE (PISTOIA)
ITALY
Tel. +039 0573/959848
Fax:

e-mail address of the competent person
responsible for the Safety Data Sheet
Supplier:

info@marbec.it

1.4. Emergency telephone number

For urgent inquiries refer to

MARBEC srl
+390573959848 h8.30-13 h14-18 or +393348578502
Telephone number of Poison Centers open 24/24 h
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. 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:

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 EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

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

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P337+P313	If eye irritation persists: Get medical advice / attention.
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 well-ventilated place. Keep cool.

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

2.3. Other hazards

The product hydrolyzes with the formation of methanol (CAS no. 67-56-1). Methanol is classified for both physical and health hazards. The rate of hydrolysis and therefore also the relevance for the hazard of the product strongly depend on the specific conditions. Based on available data, the product does not contain PBT or vPvB substances in percentage $\geq 0.1\%$.

The product does not contain substances having properties of interference with the endocrine system in a concentration $\geq 0.1\%$.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

modified polysiloxane

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
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Titanium tetrabutanolate

CAS 5593-70-4 $1 \leq x < 3$ Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

EC 227-006-8

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REACH Reg. 01-2119967423-33

METHANOL

CAS 67-56-1 $0,5 \leq x < 1$ Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370

EC 200-659-6

INDEX 603-001-00-X

STOT SE 2 H371: $\geq 3\%$
STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l, STA Inhalation mists/powders: 0,501 mg/l

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. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly 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

Methanol (CAS 67-56-1) is well and rapidly absorbed through all routes of exposure and is toxic regardless of the type of dose taken. Methanol can cause mucosal irritation, 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. Further information on toxicology in section 11 should be observed.

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

Water jet

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

In case of fire possible formation of fumes and dangerous gases. Exposure to combustion products can be a health hazard! Hazardous products in case of fire: toxic and very toxic fumes.

5.3. Advice for firefighters**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Use a self-contained gas device. Keep people without protective devices 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). Drive away people without protection devices. Avoid contact with eyes and skin. Do not breathe gas / vapors / aerosols. In the event of a spill material clearly indicate the danger of slipping. Do not walk through the spilled material

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

Pick up mechanically and dispose of in accordance with regulations. Do not wash off with water. In small quantities: Collect with neutral material (non-alkaline / non-acidic) suitable for the absorption of liquids, eg. 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 approved electrical appliances. Remove any slippery layer that may have remained with detergent / soap solution or other biodegradable detergent. Silicone oils are slippery and spilled substances are therefore a safety hazard. To improve adhesion, spread sand or inert and granular material

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

Provide good ventilation of the environments and workplaces. Necessary suction on the object. Spilled substance causes serious slip hazard. Avoid the formation of aerosols. In the event of aerosol formation, special protective measures must be taken (aspiration, respiratory protection). Observe the instructions referred to in section 8. Keep away from the incompatible substances referred to in point 10.

The product can release methanol. In closed environments, vapors can form mixtures with air, which in the presence of ignition sources cause an explosion even inside empty, uncleaned containers. Keep away from sources of ignition 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 and dry place. Protect from moisture. Keep the containers in a well-ventilated place.

Storage class TRGS 510 (Germany):

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7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
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
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
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

Titanium tetrabutanolate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,08	mg/l
Normal value in marine water	0,008	mg/l
Normal value for fresh water sediment	0,0687	mg/kg
Normal value for marine water sediment	0,0069	mg/kg
Normal value for water, intermittent release	2,25	mg/l
Normal value of STP microorganisms	65	mg/l
Normal value for the terrestrial compartment	0,0168	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Chronic local	Chronic systemic
Oral				3,75 mg/kg bw/d			
Inhalation				38 mg/m3			127 mg/m3
Skin				37,5 mg/kg bw/d			

METHANOL**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	200	1080	800	SKIN
MAK	DEU	130	100	260	200	SKIN
VLA	ESP	266	200			SKIN
VLEP	FRA	260	200	1300	1000	SKIN 11
VLEP	ITA	260	200			SKIN
VLE	PRT	260	200			SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

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

When handling this product, protective gloves must always be worn in compliance with recognized standards such as EN374.

Recommended glove material:

Protective gloves in butyl rubber

Material thickness:> 0.5mm

Breakthrough time:> 480 min

Recommended glove material:

Protective gloves in nitrile rubber

Material thickness:> 0.4mm

Breakthrough time: 10 - 30 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

Please also take into consideration the specific local conditions in which the product is used, such as the danger of cuts, abrasion and the duration of contact. It should be borne in mind that, in practice, in the face of many influencing factors (e.g. temperature), the daily wearing time of a chemical resistant protective glove can be significantly shorter than the breakthrough time determined by the tests.

SKIN PROTECTION

When handled outdoors: Chemical protective clothing, a full liquid-tight protective suit may possibly be required. Please observe the supplier's instructions regarding permeability.

EYE PROTECTION

It is recommended to wear airtight protective goggles (ref. Standard EN 166).

RESPIRATORY PROTECTION

If inhalation exposure above the occupational limit value cannot be excluded, a system of appropriate respiratory protection. Suitable respiratory equipment: Self-contained breathing apparatus, in compliance with regulations recognized as EN 137.

The time limit of use for respiratory devices as well as the instructions of the respective manufacturer must be observed.

ENVIRONMENTAL EXPOSURE CONTROLS

Do not allow it to enter water, wastewater and soil

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colorless to yellowish	
Odour	characteristic	
Melting point / 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:substance/mixture reacts with water
Kinematic viscosity	14 mm ² /s a 25°C	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	43 hPa / 20°C	
Density and/or relative density	1,03 kg/l	
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

Explosive properties not explosive

Oxidising properties not oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid

Moisture, heat, open flames and other sources of ignition.

10.5. Incompatible materials

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, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

METHANOL

WORKERS: inhalation; contact with the skin.

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

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

METHANOL

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

Interactive effects

Information not available

ACUTE TOXICITY

For similar products, in experiments on animals, no indications were found relating to a specific hazard due to inhalation of aerosols. However, it is advisable to avoid inhaling breathable aerosols.

Product data:

<i>Route of exposure</i>	<i>Result effect</i>	<i>Species / test system</i>	<i>Source</i>
Inhalation (aerosol)	LC50> 240 ml / h; 4 h Absence of mortality in highly enriched or saturated atmosphere at room temperature	Rat	Conclusion by analogy

ATE (Oral) of the mixture: >2000 mg/kg
ATE (Dermal) 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 the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Dermal):	300 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)
STA (Inhalation mists/powders):	0,501 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	3 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

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

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Hydrolysis product / impurity: methanol (CAS 67-56-1) is well and rapidly absorbed by all routes of exposure and is toxic regardless of the type of dose taken. Methanol can cause mucosal irritation, 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 - for Crustacea

> 200 mg/l/48h Daphnia Magna

Chronic NOEC for Fish

> 10000 mg/l fishes

12.2. Persistence and degradability

POLYSILOXANES

NOT rapidly degradable

METHANOL

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

12.3. 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 the suspended particles. Separation by sedimentation

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 \geq 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**

Recommendation: Material that cannot be reused, treated or recycled should be disposed of at an authorized facility in accordance with national, state and local regulations. Depending on the provisions, waste treatment methods may include for example landfilling or incineration.

CONTAMINATED PACKAGING

Empty packages must be clean (free of residues and condensation, cleaned with a spatula). The packaging must preferably be reused in compliance with the local / national provisions in force. Packaging that cannot be cleaned must, like the substance, be disposed of.

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 or ID 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

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

Transport by rail: No hazardous materials of class 3 - ADR / RID 2.2.3.1.1 note 1 - the material does not sustain combustion!

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

Air transport: No hazardous materials 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 (IBCs) or in ventilated packaging!

Important information in other chapters should be observed.

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: P5c

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

Product

Point 3 - 40

Contained substance

Point 69 METHANOL

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 \geq 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:

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	Causes damage to organs.
H318	Causes serious eye damage.

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (UE) 2021/849 (XVII 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.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

02 / 03 / 09 / 11 / 12 / 15 / 16.