

MARBEC S.R.L.	Revision No. 7
0030245 - VETRONET	Revision date 24/08/2023
	Printed on 24/08/2023
	Page No. 1/17
	Replaces revision:6 (Revision date: 17/01/2023)

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:	0030245
Denomination	VETRONET
Chemical name and synonyms	VETRONET
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	Cleaner for glass and polished stones
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	becarelli@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 3357267921 p.m.	
Telephone number of Poison Control Centers active 24 hours a day	
IRCSS Maugeri Foundation –	
Pavia 0039-0382-24444	
CAV Ospedali Riuniti –	
Bergamo 0039-800-883300	
CAV Niguarda Ca' Granda Hospital –	
Milan 0039-02-66101029	
CAV Careggi Hospital- Florence 0039-055-7947819	
CAV Policlinico Gemelli –	
Rome 0039-06-3054343	
CAV Policlinico Umberto I –	
Rome 0039-06 49978000	
CAV Cardarelli Hospital –	
Naples 0039-081 5453333	
CAV Azienda Ospedaliera Integrata Verona - Verona 800011858	

MARBEC S.R.L.	Revision No. 7
0030245 - VETRONET	Revision date 24/08/2023
	Printed on 24/08/2023
	Page No. 2/17
	Replaces revision:6 (Revision date: 17/01/2023)

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous under the provisions of Regulation (EC) 1272/2008 (CLP).
The product, however, containing hazardous substances in such a concentration as to be declared in section no. 3, requires a safety data sheet with adequate information, in accordance with Regulation (EU) 2020/878.
Classification and hazard statements:

2.2. Label elements

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

Hazard pictograms: --
Warnings: --

Hazard statements:

EUH210 Safety data sheet available on request.

Precautionary statements:

--

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

Nonionic surfactants <5%, Preservatives (1,2-benzisothiazol-3(2H)-one, sodium pyrrithione), Parfum

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	x = Conc. %	Classification 1272/2008 (CLP)
2-PROPANOL CAS 67-63-0 CE 200-661-7 INDEX 603-117-00-0 Reg. REACH 01-2119457558-25-xxxx	3 ≤ x < 9	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

**DIPROPYLENE GLYCOL
MONOMETHYL ETHER**

CAS 34590-94-8

 $0 \leq x < 0.5$

Substance with a Community limit of exposure in the workplace.

EC 252-104-2

INDEX -

Reg. REACH 01-2119450011-60-
xxxx**ETHANOLAMINE**

CAS 141-43-5

 $0 \leq x < 0.5$ Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B
H314, Eye Dam. 1 H318, STOT SE 3 H335
Stott to 3H335: $\geq 5\%$

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

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 thoroughly with water for at least 15 minutes, opening the eyelids wide. Seek medical attention if the problem persists.

SKIN: To take off contaminated clothes. Wash immediately and thoroughly with water. If irritation persists, seek medical attention. Wash contaminated clothing before using it again.

INHALATION: Take the subject to fresh air. If breathing is difficult, call a doctor immediately.

INGESTION: Seek medical attention immediately. Induce vomiting only on the advice of the doctor. Do not administer anything orally if the subject is unconscious and unless authorized by the physician.

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

Stop the leak if there is no danger.

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the Safety Data Sheet) to prevent contamination of the skin, eyes and personal clothing. These indications are valid both for workers and for emergency interventions.

6.2. Environmental precautions

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

6.3. Methods and materials for containment and remediation

Vacuum the spilled product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder 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

Keep away from heat, sparks and open flames, do not smoke or use matches or lighters. Without adequate ventilation, vapours can accumulate on the ground and ignite even at a distance, if ignited, with the danger of backfire. Avoid the accumulation of electrostatic charges. Connect to an earth socket in the case of large packaging during decanting operations and wear antistatic shoes. Strong agitation and vigorous flow of liquid in pipes and equipment can cause the formation and accumulation of electrostatic charges. To avoid the danger of fire and explosion, never use compressed air in handling. Open containers carefully, as they may be under pressure. Do not eat, drink, or smoke during use. Avoid dispersing the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store closed containers in a well-ventilated place, away from direct sunlight. Store in a cool, well-ventilated place, away from heat sources, open flames, sparks and other sources of ignition. Store containers away from any incompatible materials, checking section 10.

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 BETWEEN ITA PRT	España France Italy Portugal	Occupational exposure limits for chemical agents in Spain 2021 Limit values for occupational exposure to chemical agents in France. ED 984 - INRS Legislative Decree 9 April 2008, n.81 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 EU	United Kingdom OEL EU	EH40/2005 Workplace exposure limits (Fourth Edition 2020) 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

2-PROPANOL								
Threshold limit value								
Guy	State	TWA/8h		STEL/15min		Notes / Remarks		
		mg/m3	ppm	mg/m3	ppm			
AGW	GAVE	500	200	1000	400			
MAK	GAVE	500	200	1000	400			
VLA	ESP	500	200	1000	400			
OEL	FROM			980	400			
WELL	GBR	999	400	1250	500			
TLV-ACGIH		492	200	983	400			
Predicted concentration of no effect on the environment - NECP								
Reference value in fresh water				140,9		mg/L		
Reference value in seawater				140,9		mg/L		
Reference value for freshwater sediment				552		mg/kg		
Reference value for sediment in seawater				552		mg/kg		
Reference value for the land compartment				28		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	26 mg/kg/d							
Inhalation	89 mg/kg							500 mg/m3
Dermal	319 mg/kg/d							888 mg/kg/d

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		
OEL	FROM	308	50			SKIN		

OEL	ITA	308	50	SKIN
WANT	PRT	308	50	SKIN
WELL	GBR	308	50	SKIN
OIL	EU	308	50	SKIN

ETHANOLAMINE								
Threshold limit value								
Guy	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		
OEL	FROM	2,5	1	7,6	3	SKIN		
OEL	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	EU	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

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.

HAND PROTECTION

Protect your hands with category III work gloves (ref. EN 374 standard).

For the final choice of the material of work gloves, the following must be considered: compatibility, degradation, break-time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and mode of use.

SKIN PROTECTION

Wear long-sleeved work clothes and safety footwear for professional use of category I (ref. Regulation 2016/425 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 necessary in 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	
Inflammability	fireproof	
Lower explosive limit	Not applicable	
Upper explosive limit	Not applicable	
Flash point	> 60 °C	
Auto-ignition temperature	Not applicable	
ph	7	
Kinematic viscosity	Unavailable	
Solubility	miscible in water	
Partition coefficient: n-octanol/water	Unavailable	
Vapour pressure	Unavailable	
Density and/or Relative Density	1 kg/l	
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) 3.00 % - 30.00 g/litre

Explosive properties Non-explosive

Oxidizing properties Non-oxidizing

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

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product were evaluated on the basis of the properties of the substances contained, according to the criteria provided for by the reference legislation for classification.

Therefore, consider the concentration of the individual hazardous substances that may be mentioned in section 3, to evaluate the toxicological effects deriving from exposure to the product.

11.1. Information on hazard classes defined in Regulation (EC) No 1272/2008Metabolism, 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) of the mixture:
ATE (Oral) of the mixture:
ATE (Cutaneous) of the mixture:

Unclassified (no relevant components)
Unclassified (no relevant components)
Unclassified (no relevant components)

2-PROPANOL

LD50 (Cutanea):
LD50 (Oral):
LC50 (Vapor Inhalation):

12800 mg/kg Rat
4710 mg/kg Rat
72.6 mg/l/4h Rat

ETHANOLAMINE

LD50 (Cutanea):
STA (Cutaneous):

2504 mg/kg ratto
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):
LC50 (Vapor Inhalation):

1515 mg/kg ratto
1,48 mg/l/4h ratto

SKIN CORROSION / SKIN IRRITATION

Does not meet the classification criteria for this hazard class

SEVERE EYE DAMAGE/EYE IRRITATION

Does not meet the classification criteria for this hazard class

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

Use according to good working practices, avoiding dispersing the product into the environment. Notify the competent authorities if the product has reached watercourses or if it has contaminated soil or vegetation.

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

2-PROPANOL

LC50 - Fish	> 100 mg/l/96h leuciscus idus melanotus, statico
EC50 - Crustaceans	> 100 mg/l/48h Daphnia magna Static test
EC50 - Algae / Aquatic Plants	> 100 mg/l/72h scenedesmus subspicatus. Prova statica

12.2. Persistence and degradability

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Water solubility	1000 - 10000 mg/l
Quickly degradable	

ETHANOLAMINE

Water solubility	1000 - 10000 mg/l
Quickly degradable	

2-PROPANOL

Quickly degradable

12.3. Bioaccumulation potential

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Partition coefficient: n-octanol/water	0,0043
--	--------

ETHANOLAMINE

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

2-PROPANOL

Partition coefficient: n-octanol/water	0,05
--	------

MARBEC S.R.L.	Revision No. 7
0030245 - VETRONET	Revision date 24/08/2023
	Printed on 24/08/2023
	Page No. 13/17
	Replaces revision:6 (Revision date: 17/01/2023)

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 \geq 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. The residues of the product as they are are to be considered special non-hazardous waste.
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 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 \geq 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

Information not available

Classification for water pollution in Germany (AwSV, vom 18. April 2017)

WGK 1: Not very dangerous for water

15.2. Chemical Safety Assessment

A chemical safety assessment has not been developed for the mixture/substances listed in section 3.

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific Target Organ Toxicity - Single Exposure, Category 3
H225	Easily flammable liquid and vapours.
H302	Harmful was ingested.
H312	Harmful by skin contact.
H332	Harmful if inhaled.
H314	It causes severe skin burns and serious eye damage.
H319	It causes severe eye irritation.
H335	It can irritate the respiratory tract.
H336	It can cause drowsiness or dizziness.
EUH210	Safety data sheet available on request.

LEGEND:

MARBEC S.R.L.	Revision No. 7
0030245 - VETRONET	Revision date 24/08/2023
	Printed on 24/08/2023
	Page No. 16/17
	Replaces revision:6 (Revision date: 17/01/2023)

- 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 - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - Sito Web IFA GESTIS
 - ECHA Agency website
 - Database of SDS models of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note to the user:

MARBEC S.R.L.	Revision No. 7
	Revision date 24/08/2023
0030245 - VETRONET	Printed on 24/08/2023
	Page No. 17/17
	Replaces revision:6 (Revision date: 17/01/2023)

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.