

# PASSIONE BEAUTY S.P.A.

## REF 2016 - DL0175 BINDER

Revision nr.5  
Dated 25/09/2023  
Printed on 25/09/2023  
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Replaced revision:4 (Dated 25/09/2023)

EN

### Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 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: REF 2016  
Product name: DL0175 BINDER

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

Intended use: Binder

##### 1.3. Details of the supplier of the safety data sheet

Name: PASSIONE BEAUTY S.P.A.  
Full address: Viale Crispi 89-93  
District and Country: 36100 Vicenza (VI) Italia  
Tel.: +39 0444-239569  
e-mail address of the competent person responsible for the Safety Data Sheet: quality@pucosmetica.it

##### 1.4. Emergency telephone number

For urgent inquiries refer to: +39 0444-239569

#### 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 2	H225	Highly flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

##### 2.2. Label elements

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

Hazard pictograms:



Signal words: Danger

Hazard statements:

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

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### SECTION 2. Hazards identification ... / >>

Precautionary statements:

- P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P310** Immediately call a POISON CENTER / doctor / . . .  
**P370+P378** In case of fire: use . . . to extinguish.  
**P261** Avoid breathing dust / fume / gas / mist / vapours / spray.

**Contains:** 2,2-bis-(4-(2-hydroxy-3-methacryloxypropoxy)BIS-GMA  
2-Hydroxyethyl methacrylate  
ETHYL ACETATE

#### 2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

### SECTION 3. Composition/information on ingredients

#### 3.2. Mixtures

Contains:

Identification		x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>ETHYL ACETATE</b>			
INDEX	607-022-00-5	86 ≤ x < 90	<b>Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066</b>
EC	205-500-4		
CAS	141-78-6		
REACH Reg.	01-2119475103-46-00XX		
<b>2,2-bis-(4-(2-hydroxy-3-methacryloxypropoxy)BIS-GMA</b>			
INDEX		8,5 ≤ x < 10	<b>Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317</b>
EC	216-367-7		
CAS	1565-94-2		
<b>2-Hydroxyethyl methacrylate</b>			
INDEX	607-124-00-X	2 ≤ x < 2,5	<b>Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: D</b>
EC	212-782-2		
CAS	868-77-9		

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

Contact with eyes: seek medical attention immediately. Call a poison control center or doctor. Rinse your eyes immediately with plenty of water, occasionally lifting the upper and lower eyelids.  
Check and remove any contact lenses. Continue rinsing for at least 10 minutes.  
Chemical burns should be treated promptly by a doctor.

Inhalation: consult a doctor immediately. Call a poison control center or doctor. Remove the victim to fresh air and keep him at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear a suitable mask or self-contained breathing apparatus. If you are not breathing, if your breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.  
It may be dangerous for the person providing help to give mouth-to-mouth resuscitation. If he is unconscious, place him in the lateral position and consult a doctor immediately. Keep the airways open. Loosen tight clothing such as collars, ties, belts or belts.

Skin contact: Seek medical attention immediately. Call a poison control center or doctor. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash wash contaminated clothing thoroughly with water before removing or wear gloves.

**SECTION 4. First aid measures ... / >>**

Continue rinsing for at least 10 minutes. Chemical burns should be treated promptly by a doctor. In case of complaints or symptoms, avoid further exposure.

Wash clothing before reusing it. Clean your shoes thoroughly before using them again.

Ingestion: consult a doctor immediately. Call a poison control center or doctor. Rinse your mouth with water. Remove dentures, if present. If the material has been ingested and the exposed person is conscious, drink small quantities of water. Stop if the exposed person feels sick because vomiting can be dangerous. Do not induce vomiting unless directed by medical personnel. If vomiting occurs, the head should be kept low so that the vomit does not enter the lungs. Chemical burns should be treated promptly by a doctor. Never give anything by mouth to an unconscious person. If he is unconscious, place him in the lateral position and consult a doctor immediately. Keep the airways open. Loosen tight clothing such as collars, ties, belts or belts.

Protection of first aiders: No action shall be taken involving any personal risk or without adequate training. If it is suspected that fumes are still present, the rescuer should wear a suitable mask or self-contained breathing apparatus. It may be dangerous for the person providing help to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wearing gloves.

**4.2. Most important symptoms and effects, both acute and delayed**

Signs/symptoms of overexposure

Eye contact: Adverse symptoms may include the following:

Ache  
irritation  
redness

Inhalation: Adverse symptoms may include the following:

nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

Skin contact: Adverse symptoms may include the following:

pain or irritation  
redness  
blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

**4.3. Indication of any immediate medical attention and special treatment needed**

Notes to physician: Treat symptomatically. Contact a poison treatment specialist immediately if large quantities have been ingested or inhaled

Specific treatments: no specific treatments

**SECTION 5. Firefighting measures****5.1. Extinguishing media**

Information not available

**5.2. Special hazards arising from the substance or mixture**

Hazards arising from the substance or mixture: Highly flammable liquid and vapour. Runoff into sewers may create a fire or explosion hazard. In the event of a fire or overheating, a pressure increase will occur and the container may burst with the risk of a subsequent explosion.

Hazardous Combustion Products: Decomposition products may include the following materials:

carbon dioxide  
carbon monoxide

**5.3. Advice for firefighters**

Information not available

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent

**SECTION 6. Accidental release measures ... / >>**

any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

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

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Information not available

**7.2. Conditions for safe storage, including any incompatibilities**

Shield UV light sources. Store at 13 to 27°C (55.4 to 80.6°F). Store in accordance with local regulations. Store in a separate, approved area. Store in the original container protected from direct sunlight in a dry, cool, well-ventilated area, away from incompatible materials (see Section 10) and food and drink.

Shop locked. Eliminate all sources of ignition. Separated from oxidizing materials. Keep container tightly closed and sealed until ready for use. Open containers must be carefully closed and kept in an upright position to avoid leaks. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

See Section 10 for incompatible materials before handling or use.

**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
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; 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 2022

## SECTION 8. Exposure controls/personal protection ... / &gt;&gt;

## ETHYL ACETATE

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	730	200	1460	400			
MAK	DEU	750	200	1500	400			
VLA	ESP	734	200	1468	400			
VLEP	FRA	734	200	1468	400			
VLEP	ITA	734	200	1468	400			
WEL	GBR	734	200	1468	400			
OEL	EU	734	200	1468	400			
TLV-ACGIH		1441	400					

## 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	Acute systemic	Chronic local	Chronic systemic
Oral				4,5 mg/kg bw/d				
Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin				37 mg/kg bw/d				63 mg/kg bw/d

## 2-Hydroxyethyl methacrylate

## 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	Acute systemic	Chronic local	Chronic systemic
Oral				0,83 mg/kg bw/d				
Inhalation				2,9 mg/m3				4,9 mg/m3
Skin				0,83 mg/kg bw/d				1,3 mg/kg bw/d

## Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

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

; MED = medium hazard ; HIGH = high hazard.

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

## HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

## SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

## EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

## RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing

**SECTION 8. Exposure controls/personal protection ... / >>**

apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

**SECTION 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	liquid	
Colour	senza colore	
Odour	estere	
Melting point / freezing point	not available	
Initial boiling point	77,1 °C	
Flammability	not available	
Lower explosive limit	not available	Concentration: 0,04 %
Upper explosive limit	not available	
Flash point	-3,3 °C	
Auto-ignition temperature	750 °C	Remark:a 900 °C
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Dynamic viscosity	15	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	0,94	
Relative vapour density	1	
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**

Self-accelerating polymerisation temperature 75 °C

**SECTION 10. Stability and reactivity****10.1. Reactivity**

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

**ETHYL ACETATE**

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

**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.

**ETHYL ACETATE**

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**SECTION 10. Stability and reactivity** ... / >>

## ETHYL ACETATE

Avoid exposure to: light, sources of heat, naked flames.

**10.5. Incompatible materials**

## ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, chlorosulphuric acid.

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

**SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**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

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

## ETHYL ACETATE

LD50 (Oral):

5620 mg/kg ratt

## 2-Hydroxyethyl methacrylate

LD50 (Oral):

5050 mg/kg rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

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

**SECTION 11. Toxicological information ... / >>**

Does not meet the classification criteria for this hazard class

**STOT - SINGLE EXPOSURE**

May cause drowsiness or dizziness

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

**ASPIRATION HAZARD**

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

**SECTION 12. Ecological information**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

**12.1. Toxicity****ETHYL ACETATE**

LC50 - for Fish

212,5 mg/l/96h *Heteropneustes fossilis*

Chronic NOEC for Fish

75,6 mg/l *Pimephales promelas* -

Chronic NOEC for Crustacea

2,4 mg/l

**2-Hydroxyethyl methacrylate**

LC50 - for Fish

227000 µg/l *Pimephales promelas*

**12.2. Persistence and degradability**

Information not available

**12.3. Bioaccumulative potential****ETHYL ACETATE**

Partition coefficient: n-octanol/water

0,68

BCF

30

**2-Hydroxyethyl methacrylate**

Partition coefficient: n-octanol/water

0,42

**12.4. Mobility in soil**

Information not available

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  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



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### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

#### CONTAMINATED PACKAGING

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

### SECTION 14. Transport information

#### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1993

#### 14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S.

IMDG: FLAMMABLE LIQUID, N.O.S.

IATA: FLAMMABLE LIQUID, N.O.S.

#### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



#### 14.4. Packing group

ADR / RID, IMDG, IATA: II

#### 14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

#### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33 Limited Quantities: 1 L  
Special provision: 274, 601, 640(C-D)

IMDG: EMS: F-E, S-E Limited Quantities: 1 L

IATA: Cargo: Maximum quantity: 60 L

Passengers: Maximum quantity: 5 L

Special provision: A3

Tunnel restriction code: (D/E)

Packaging instructions: 364

Packaging instructions: 353

#### 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

## SECTION 15. Regulatory information ... / &gt;&gt;

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

Product

Point 3 - 40

Contained substance

Point 75

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:

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

## 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

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## SECTION 16. Other information ... / &gt;&gt;

- 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

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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)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

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- 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:

04 / 05 / 07.