

Safety data sheet

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

1.1. Product identifier

Code: IW-EPOXY FLUID PART.A
 Product name: --

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

Intended use: Clear epoxy resin Mixing A:100 B:50

1.3 Details of the supplier of the safety data sheet

Company name: IDEAL WORK SRL
 Address: Via Kennedy, 52
 Place and country: 31030 Vallà di Riese Pio X (TV)
 Italy
 tel. 0423 /4535
 fax 0423 /748429

e-mail address for a competent person responsible for the safety data sheet

sicurezza@idealwork.it

1.4 Emergency telephone number

For information in an emergency

Poison center:
 National Poisons Information Service (Birmingham Unit) City Hospital
 Dudley Rd Birmingham
 Telephone: +44 121 507 4123
 Fax: +44 121 507 55 88
 Emergency telephone: 844 892 0111

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 2015/830. 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:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

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:

H319 Causes serious eye irritation.
 H315 Causes skin irritation.

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H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P201	Obtain special instructions before use.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	IF ON SKIN: Wash with plenty of water
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents / container in accordance with local / regional / national / international.

Contains: reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).
1,6-Hexanediol Diglycidyl Ether

VOC (Directive 2004/42/EC) :

Topcoat - base coatings - clear coating.

VOC given in g/litre of product in a ready-to-use condition :	0,00
Limit value:	420,00

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).		
CAS 25068-38-6	$50 \leq x < 100$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC 500-033-5		
INDEX 603-074-00-8		
Reg. no. 01-2119456619-26		
1,6-Hexanediol Diglycidyl Ether		
CAS 16096-31-4	$30 \leq x < 50$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC 240-260-4		
INDEX -		
Reg. no. 01-2119463471-41		

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated

clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless 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

Information not available

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

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

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

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. If the product is flammable, use explosion-proof equipment. 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

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,996	mg/kg
Normal value for marine water sediment	0,1	mg/kg
Normal value for water, intermittent release	0,018	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	11	mg/kg
Normal value for the terrestrial compartment	0,196	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	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral	VND	0,75 mg/kg bw/d	VND	0,75 mg/kg bw/d				
Inhalation					VND	12,25 mg/m3	VND	12,25 mg/m3
Skin	VND	3,571 mg/kg bw/d	VND	3,571 mg/kg bw/d	VND	8,33 mg/kg bw/d	VND	8,33 mg/kg bw/d

1,6-Hexanediol Diglycidyl Ether

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,011	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,283	mg/kg
Normal value for marine water sediment	0,028	mg/kg
Normal value for water, intermittent release	0,115	mg/l
Normal value of STP microorganisms	1	mg/l
Normal value for the terrestrial compartment	0,223	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	Chronic local	Acute local	Acute systemic	Chronic systemic
Oral		0,83 mg/kg bw/d		0,83 mg/kg bw/d				
Inhalation		2,9 mg/m3	0,27 mg/m3	2,9 mg/m3		4,9 mg/m3	0,44 mg/m3	4,9 mg/m3
Skin	0,0136 mg/cm2	1,7 mg/kg bw/d	0,0136 mg/cm2	1,7 mg/kg bw/d	0,0226 mg/cm2	0,0226	0,0226 mg/cm2	2,8 mg/kg bw/d

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

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

The following should be considered when choosing work glove material: 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.

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SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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 B 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 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.

Materiali per guanti per utilizzo a lungo termine(BTT>480 min): alcool etilvinilico laminato (EVAL), gomma butile.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	transparent
Odour	mild
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	180 °C
Boiling range	Not available
Flash point	130 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,10
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	1000 cP (Brookfield, 25°C)
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2010/75/EC) :	0
VOC (volatile carbon) :	0

SECTION 10. Stability and reactivity

10.1. Reactivity

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

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
No data available about the reactivity on the product itself.

1,6-Hexanediol Diglycidyl Ether

Stable in normal conditions of use and storage.

10.2. Chemical stability

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

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
Stable in normal conditions of use and storage.

1,6-Hexanediol Diglycidyl Ether

Stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
By weight over 0,5 kg to add an aminic base substance drives to a strong exothermic reaction.
The reaction with aminic components is not reversible .

1,6-Hexanediol Diglycidyl Ether

Stable in normal conditions of use and storage.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
Avoid exposure to: high temperatures.
The thermal decomposition develops gases which can cause pressure in closed systems.

1,6-Hexanediol Diglycidyl Ether

Stability ensured at normal use and storage conditions .

10.5. Incompatible materials

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
Avoid contact with: oxidising agents,acids,bases.Avoid unintended contact with amines.

1,6-Hexanediol Diglycidyl Ether

Avoid contact with: strong acids,strong bases,strong oxidising agents.

10.6. Hazardous decomposition products

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
The thermal decomposition develops: carbon monoxide, water, phenols, phenolic derivatives.
An uncontrolled exothermic reaction build up phenolic derivatives , carbon monoxide and water.

1,6-Hexanediol Diglycidyl Ether

In decomposition develops: carbon oxides.

When heated to decomposition releases: toxic fumes.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

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LD50 (Dermal) of the mixture:
Not classified (no significant component)

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

LD50 (Oral) > 2000 mg/kg female rat

LD50 (Dermal) > 2000 mg/kg male/female rat

1,6-Hexanediol Diglycidyl Ether

LD50 (Oral) 2189 mg/kg male/female rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

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

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

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

SECTION 12. Ecological information

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

12.1. Toxicity

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

LC50 - for Fish	3,6 mg/l/96h <i>Salmo gairdneri</i>
EC50 - for Crustacea	1,7 mg/l/48h <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	9,4 mg/l/72h <i>Scenedesmus capricornutum</i>
Chronic NOEC for Crustacea	0,3 mg/l <i>Daphnia magna</i>

1,6-Hexanediol Diglycidyl Ether

LC50 - for Fish	30 mg/l/96h <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	47 mg/l/48h <i>Daphnia magna</i>

12.2. Persistence and degradability

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

Solubility in water slightly soluble > 5,4 - < 8,4 mg/l

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NOT rapidly degradable 1,6-Hexanediol Diglycidyl Ether	5 % 28 d
Solubility in water	very soluble 11900 mg/l
Entirely degradable	47 % 28 d

12.3. Bioaccumulative potential

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

BCF 31

1,6-Hexanediol Diglycidyl Ether

BCF 3,57

12.4. Mobility in soil

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700).

Partition coefficient: soil/water 2,65

1,6-Hexanediol Diglycidyl Ether

Partition coefficient: soil/water 2,98

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 greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

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.

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

ADR / RID, IMDG, IATA: 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity \leq 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin, 1,6-Hexanediol Diglycidyl Ether)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin, 1,6-Hexanediol Diglycidyl Ether)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol A epoxy resin, 1,6-Hexanediol Diglycidyl Ether)

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14.3. Transport hazard class(es)

ADR / RID: Class: 9 Label: 9
 IMDG: Class: 9 Label: 9
 IATA: Class: 9 Label: 9



14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous
 IMDG: Marine Pollutant
 IATA: Environmentally Hazardous



14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 L	Tunnel restriction code: (-)
	Special Provision: -		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
		Maximum quantity: 450 L	Packaging instructions: 964
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:		
	Special Instructions:	A97, A158, A197	

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

Approval code plastic can 3H1/Y1.9/200/17 – 10 KG

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC: E2

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

Product

Point 3

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 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.

VOC (Directive 2004/42/EC) :

Topcoat - base coatings - clear coating.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average 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) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 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)

- 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.