Safety data sheet

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

1.1. Product identifier

Code: **F208**
Product name **RESICOL 100 Comp. A**

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

Intended use **Epoxy putty**

Identified Uses	Industrial	Professional	Consumer
Epoxy putty	✓	✓	-

1.3. Details of the supplier of the safety data sheet

Name **Resimix s.r.l.**
Full address **via Pacinotti 12/14**
District and Country **36040 Brendola (VI)**
Italia
Tel. +39 (0) 444 400 773
Fax +39 (0) 444 601 662
e-mail address of the competent person responsible for the Safety Data Sheet **laboratorio@resimix.com**

Product distribution by: **Resimix s.r.l.**

1.4. Emergency telephone number

For urgent inquiries refer to
CAVp Osp. Pediatrico Bambino Gesù, Roma 06 68593726
Az. Osp. Univ. Foggia, Foggia 0881-732326
Az. Osp. "A. Cardarelli", Napoli 081-7472870
CAV Policlinico "Umberto I", Roma 06-49978000
CAV Policlinico "A. Gemelli", Roma 06-3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica, Firenze 055-7947819
CAV Centro Nazionale di Informazione Tossicologica, Pavia 0382-24444
Osp. Niguarda Ca'' Granda, Milano 02-66101029
Azienda Ospedaliera Papa Giovanni XXII, Bergamo 80088330

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 EC Regulation 1907/2006 and subsequent amendments.
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:

Germ cell mutagenicity, category 2	H341	Suspected of causing genetic defects.
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 3	H412	Harmful 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:

SECTION 2. Hazards identification ... / >>

Signal words: Warning

Hazard statements:

H341	Suspected of causing genetic defects.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P201	Obtain special instructions before use.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves / clothing and eye / 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.
P501	Dispose of contents / container in accordance with local / regional / national / international.

Contains: 2,3-epoxypropyl o-tolyl ether
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).

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 ≤ 700).		
CAS 25068-38-6	10 ≤ x < 30	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		
2,3-epoxypropyl o-tolyl ether		
CAS 2210-79-9	1 ≤ x < 10	Muta. 2 H341, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411, Note c
EC 218-645-3		
INDEX 603-056-00-X		
Reg. no. 01-2119966907-18		

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.

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

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
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. 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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other

SECTION 7. Handling and storage ... / >>

sources of ignition. 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 ≤ 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								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	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

2,3-epoxypropyl o-tolyl ether

Predicted no-effect concentration - PNEC								
Normal value in fresh water						0,0028	mg/l	
Normal value in marine water						0,00028	mg/l	
Normal value for fresh water sediment						0,039	mg/kg	
Normal value for marine water sediment						0,004	mg/kg	
Normal value for water, intermittent release						0,028	mg/l	
Normal value of STP microorganisms						10	mg/l	
Normal value for the terrestrial compartment						0,012	mg/kg	
Health - Derived no-effect level - DNEL / DMEL								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	0,14 mg/kg bw/d				
Inhalation					40 mg/m3	40 mg/m3	0,46 mg/m3	0,46 mg/m3
Skin							VND	0,139 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.

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

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.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700).
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		paste
Colour		grey
Odour		mild
Odour threshold		Not available
pH		Not available
Melting point / freezing point		Not available
Initial boiling point		Not available
Boiling range		Not available
Flash point	>	60 °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		1,90
Solubility		insoluble in water
Partition coefficient: n-octanol/water		Not available
Auto-ignition temperature		Not available
Decomposition temperature		Not available
Viscosity		Not available
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

The product may react exothermically on contact with strong oxidising or reducing agents, strong acids or bases.

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

2,3-epoxypropyl o-tolyl ether
No data available about the reactivity on the product itself.

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

10.2. Chemical stability

Excessively high temperatures can cause thermal decomposition.

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

2,3-epoxypropyl o-tolyl ether
Stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

See paragraph 10.1.

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 .

2,3-epoxypropyl o-tolyl ether
Stable in normal conditions of use and storage.

10.4. Conditions to avoid

Avoid overheating.

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.

2,3-epoxypropyl o-tolyl ether
Avoid contact with: strong acids,strong bases,strong oxidising agents.
Avoid exposure to: heat.

10.5. Incompatible materials

Oxidising or reducing agents. Strong acids or bases.

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

2,3-epoxypropyl o-tolyl ether
Avoid contact with: acids,bases,oxidising agents.

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.

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.

2,3-epoxypropyl o-tolyl ether
In decomposition develops: carbon oxides,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

SECTION 11. Toxicological information ... / >>

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

2,3-epoxypropyl o-tolyl ether

LD50 (Oral)	> 5000 mg/kg male/female rat
LD50 (Dermal)	> 2000 mg/kg male/female rat
LC50 (Inhalation)	> 6,1 ppm/4h male/female rat

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

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

Suspected of causing genetic defects

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 the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

2,3-epoxypropyl o-tolyl ether

LC50 - for Fish	> 2,8 mg/l/96h Salmo gairdneri
EC50 - for Crustacea	3,3 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	5,1 mg/l/72h Pseudokirchnerella subcapitata

SECTION 12. Ecological information ... / >>

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

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

12.2. Persistence and degradability

2,3-epoxypropyl o-tolyl ether

Solubility in water	moderately soluble 840 mg/l
NOT rapidly degradable	11 a 17 % 28 d

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

Solubility in water	slightly soluble > 5,4 - < 8,4 mg/l
NOT rapidly degradable	5 % 28 d

12.3. Bioaccumulative potential

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

BCF	31

12.4. Mobility in soil

2,3-epoxypropyl o-tolyl ether

Partition coefficient: soil/water	2,32

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

Partition coefficient: soil/water	2,65

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

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

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

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

SECTION 14. Transport information ... / >>

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

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/EC: None

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 authorisarion (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.

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:

Muta. 2	Germ cell mutagenicity, category 2
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
H341	Suspected of causing genetic defects.
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.

SECTION 16. Other information ... / >>

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 (EU) 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

- 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.

Changes to previous review: all sections revised according to Regulation 830/2015/EC.