Safety data sheet

Complies with Annex II of REACH - Regulation (EU) 2020/878

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

1.1. Product identifier

Name **SUPER TRANSPARENT RESIN COMPONENT B**

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

Description/Use EPOXY HARDENER

Uses not recommended Any use that has not been indicated by the manufacturer. In this case the user may be exposed to unpredictable risks

1.3. Informazioni sul fornitore della scheda di dati di sicurezza

Company name	**Colorificio Centrale S.r.l.**
Address	**Via Industria 12,14,16**
Town and State	**25030 Torbole Casaglia (BS) - Italy**
	Tel. +39 030 2151004
	Fax. +39 030 2150858
e-mail of the competent person responsible for the safety data sheet	**info@fleurpaint.com**

1.4 Emergency telephone number:

For urgent inquiries refer to: +39 0302151004 In case of a medical emergency following exposure to a chemical:

In ENGLAND and WALES: call NHS Direct - 0845 46 47
In SCOTLAND: call NHS - 08454 24 24 24 - (UK only)
In IRELAND: call the National Poison Information Centre (NPIC) - 01 809 2566 - (24h/7d)
In OTHER COUNTRIES: call the Emergency Telephone Number of the official body responsible

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is classified as hazardous under the provisions of Regulation (EC) 1272/2008 (CLP) (as amended and adapted). The product therefore requires a safety data sheet in accordance with the provisions of Regulation (EU) 2020/878.
Any additional information concerning health and/or environmental hazards is given in sections 11 and 12 of this sheet.
Classificazione e indicazioni di pericolo:

Skin corrosion, category 1C	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin sensitisation, category 1	H317	May cause allergic skin reaction.
Dangerous for the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic organisms with long lasting effects.

2.2. Label elements

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

Danger pictograms:

Warnings: Danger

Indications of danger:

H314	Causes severe skin burns and eye damage.
H317	May cause allergic skin reaction.
H412	Harmful to aquatic organisms with long lasting effects.

Cautionary Advice:

P260	Do not breathe vapours / aerosols.
P305+P351+P338	IF IN EYES: rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin [or take a shower].
P280	Wear protective gloves / clothing and protect eyes / face.
P310	Immediately contact an POISON CENTRE / doctor.

Contiene:	POLYOXYCHYLENAMINE (polymer) REACTION PRODUCT: BISPHENOL-A-EPICHLORHYDRIN

2.3. Other dangers

According to the available data, the product does not contain PBT or vPvB substances in a concentration ≥ 0.1%.

The product does not contain substances with endocrine-disrupting properties in a concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Not relevant information

3.2. Blends

Contains:

Identification	Conc. %	Classification 1272/2008 (CLP)	notes
POLYOXYALKYLENAMINE (polymer)			
INDEX -	88	Skin Corr. 1C H314, Eye Dam. 1 H318, Aquatic Chronic 3 H412	
CE 618-561-0			
CAS 9046-10-0			
REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN			
INDEX 603-074-00-8	12	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411	
CE 500-033-5		Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%	
CAS 25068-38-6			

The full text of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4. First Aid Measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and thoroughly with water for at least 30 to 60 minutes, opening eyelids widely. Seek medical advice immediately.
SKIN: Remove contaminated clothing. Shower immediately. Seek medical advice immediately.
INGESTION: Drink as much water as possible. Seek medical advice immediately. Do not induce vomiting unless expressly authorised by a doctor. INHALATION: Get medical attention immediately. Move the person to fresh air, away from the site of the accident. If breathing ceases, administer artificial respiration. Take appropriate precautions for the rescuer.

4.2. Main symptoms and effects, both acute and delayed

No specific information is known about symptoms and effects caused by the product.

4.3. Indication of any need for immediate medical attention and special treatment

If in doubt or when symptoms of discomfort persist, consult a doctor. Never give anything by mouth to an unconscious person

SECTION 5. Fire-fighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA
The extinguishing media are the traditional ones: carbon dioxide, foam, powder and water fog.
UNSUITABLE EXTINGUISHING MEDIA
None in particular.

5.2. Special hazards arising from the substance or mixture

EXPOSURE HAZARDS IN CASE OF FIRE
Avoid breathing in the products of combustion.

5.3. Recommendations for firefighters

GENERAL INFORMATION
Cool containers with water jets to prevent decomposition of the product and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect extinguishing water which must not be discharged into the sewers. Dispose of contaminated extinguishing water and fire residue in accordance with current regulations.
EQUIPMENT
Normal fire-fighting clothing, such as an open-circuit self-contained breathing apparatus (EN 137), flame-proof suit (EN469), flame-proof gloves (EN 659) and firefighter's boots (HO A29 or A30).

SECTION 6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if there is no danger.
Wear appropriate protective equipment (including the personal protective equipment listed in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These instructions apply to both workers and emergency responders.

6.2. Environmental precautions

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

6.3. Methods and materials for containment and remediation

Vacuum the spilled product into a suitable container. Assess the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.
Ensure sufficient ventilation of the site affected by the leak. Disposal of contaminated material must be carried out in accordance with section 13.

6.4. Reference to other sections

Information on personal protection and disposal can be found in sections 8 and 13.

SECTION 7. Handling and Storage

7.1. Precautions for safe handling

Handle the product after consulting all other sections of this safety data sheet. Avoid dispersing the product in the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Keep containers closed, in a well-ventilated place, out of direct sunlight. Keep containers away from any incompatible materials, see section 10.

7.3. Particolari utilizzi finali

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information not available

8.2. Exposure controls

Appropriate technical exposure control measures, to be adopted in the workplace, must be selected and applied following the risk assessment carried out by the employer, in relation to his work activity (in accordance with Legislative Decree 81 of 9 April 2008 as amended). If the results of this assessment show that the general and collective prevention measures are not sufficient to reduce the risk, and if exposure to the mixture cannot be prevented by other means, appropriate personal protective equipment must be adopted, in accordance with the relevant UNI/EN technical standards.
Considering that the use of appropriate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust ventilation.
When choosing personal protective equipment, seek advice from your chemical suppliers if necessary.
Personal protective equipment must bear the CE marking attesting to its conformity with applicable standards.
Prevedere doccia di emergenza con vaschetta visoculare.

HAND PROTECTION
Protect hands with category III work gloves (ref. standard EN 374).
For the final choice of work glove material, the following must be considered: compatibility, degradation, breakthrough time and permeation.
In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it cannot be predicted.
Gloves have a wear time that depends on the duration and mode of use.
Material: butyl rubber
Permeation time : > 8 h
Material : nitrile rubber
Permeation time : > 480 min
Glove thickness : 0.85 mm
Material : PVC
Permeation time : 230 min

SKIN PROTECTION
Wear long-sleeved work clothes and category II safety footwear for professional use (ref. Regulation 2016/425 and EN ISO 20344). Wash with soap and water after removing protective clothing.
PROTEZIONE DEGLI OCCHI
Si consiglia di indossare occhiali protettivi ermetici (rif. norma EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) of the substance or of one or more of the substances present in the product is exceeded, it is advisable to wear a mask with a type A filter, the class (1, 2 or 3) of which must be chosen in relation to the limit concentration of use. (ref. standard EN 14387). If gases or vapours of a different nature and/or gases or vapours with particles (aerosols, fumes, mists, etc.) are present, combined type filters must be used.
The use of respiratory protective equipment is necessary if the technical measures taken are not sufficient to limit the worker`s exposure to the threshold values taken into consideration. The protection offered by masks is in any case limited.
In the event that the substance in question is odourless or its odour threshold is higher than the relevant TLV-TWA, and in the event of an emergency, wear an open-circuit self-contained breathing apparatus (ref. standard EN 137) or a supplied-air respirator (ref. standard EN 138). 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 regulations.

Product residues must not be discharged unchecked into drains or watercourses.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Physical State	liquid	
Colour	yellow	
Smell	odourless	
Melting or freezing point	not available	
Initial boiling point	300 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	130 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	7,2	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or Relative density	0,97	
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information on physical hazard classes

Information not available

9.2.2. Other security features

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

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 conditions, no hazardous reactions are to be expected.

10.4. Conditions to avoid

Avoid overheating. Observe the usual precautions against chemicals.

10.5. Incompatible materials

Strong oxidant, acids

10.6. Hazardous decomposition products

ammonia, carbon monoxide, carbon dioxide, aldehydes, ketones

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, any hazards of the product to health have been assessed on the basis of the properties of the substances contained, according to the criteria laid down in the relevant classification regulations. Therefore, the concentration of any individual hazardous substances mentioned in Section 3 must be taken into account when assessing the toxicological effects of exposure to the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN
The main route of exposure is through the skin.
Inhalation exposure can be practically excluded under the usual synthesis and handling conditions. The vapour pressure of even heated products is very low, so no toxicologically relevant vapour concentrations are released. On the other hand, the melting point is so low that the development of dust, which could easily be expected in the case of higher oligomers, is not to be considered.

Immediate, delayed and 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 relevant component)
ATE (Oral) of the mixture:	Not classified (no relevant component)
ATE (Dermal) of the mixture:	Not classified (no relevant component)

POLYOXYALKYLENAMINE (polymer)

LD50 (Cutaneous):	2980 mg/kg rabbit
LD50 (Oral):	2885 mg/kg rat

PRODOTTO DI REAZIONE: BISFENOLO-A-EPICLORIDRINA

LD50 (Cutaneous):	> 20000 mg/kg rabbit
LD50 (Oral):	> 11400 mg/kg rat

SKIN CORROSION / SKIN IRRITATION

Corrosive to the skin

POLYOXYCHYLENAMINE (polymer)
Key study with restrictions
Method OECD guideline 404
rabbit species
exposure by direct contact at 0.5 ml
corrosive result

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN
Experimental study, klimisch1
Experimental Carcinogenicity and Acute Toxicity of Representative Epoxides
Rabbit species
Non-corrosive outcome

SEVERE EYE DAMAGE/EYE IRRITATION

Causes serious eye injuries

POLYOXYCHYLENAMINE (polymer)
Key study with restrictions
Method OECD guideline 405
rabbit species
corrosive result

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN
Unrestricted key study
OECD Guideline 405
Species rabbit
concentration 0.1 ml
Non-corrosive result

RESPIRATORY OR SKIN SENSITISATION

Skin sensitising

Skin sensitisation

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN
Several authors have described skin inflammations due to industrial exposure after repeated handling of epoxy resins.
The usual consequences include allergic contact dermatitis with the following symptoms
redness, oedema, exudation, corrosion crusts, scaling. Particularly affected are the back of the hands, forearms, face and neck.('Patty's Industrial Hygiene and Toxicology' Volume II 'Toxicology' Fourth Edition, John Wiley & Sons, New York 1993)
23 out of 34 persons suffering from work-related contact dermatitis, who showed a positive reaction after application of epoxy resins in a patch test, were tested with the oligomers MG 624 and 908 in a second phase. The tests gave negative results for all subjects tested. This leads to the hypothesis that the main allergic potential must be attributed to the monomer.
In addition to the effects triggered on the skin, cases of symptoms affecting the respiratory tract, e.g. rhinitis and asthma, were very rarely found (DFG Deutsche Forschungsgemeinschaft: The MAK-Collection for Occupational Health and Safety).However, it was verified that the latter symptoms are generally not caused by "epoxy resin vapours", but by vapours produced by the epoxy resin formulation or its volatile components (acid anhydrides, amines).

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

POLYOXYCHYLENAMINE (polymer)
Negative results were reported in high-quality in vitro and in vivo genetic toxicity studies comparable to OECD Guidelines 471, 474 and 476

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

POLYOXYCHYLENAMINE (polymer)
No carcinogenicity data were available specifically on the substance. According to Annex X of REACH, a carcinogenicity study may be required if the substance has widespread dispersive use or if there is evidence of long-term or frequent human exposure and the substance is classified as mutagenic category 3 or if there is repeated dose study evidence that the substance is capable of inducing hyperplasia and/or pre-neoplastic lesions. Based on the available data, the substance is not classified as mutagenic and there was no evidence of hyperplasia and/or pre-neoplastic lesions in a 90-day skin toxicity study. Based on the weight of evidence, there are sufficient data to conclude that it is not carcinogenic.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

POLYOXYCHYLENAMINE (polymer)
Key study with restrictions
Method OECD guideline 411
rat species
dermal exposure, five days a week for 30 and 90 days at doses of 50, 80 or 250 mg/kg.
Result: NOEL 250 mg/kg/d

DANGER IN THE EVENT OF ASPIRATION

Does not meet the classification criteria for this hazard class

11.2. Information on other dangers

According to 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

The product is to be regarded as environmentally hazardous and has harmful effects on aquatic organisms with long-term adverse effects on the aquatic environment.

12.1. Toxicity

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN

EC50 - Crustaceans	2 mg/l/48h OECD Guideline 202. Daphnia magna

POLYOXYCHYLENAMINE (polymer)

LC50 - Fish	> 15 mg/l/96h OECD guideline 203. Specie Oncorhynchus mykiss
EC50 - Crustaceans	80 mg/l/48h OECD Guideline 202. Specie Daphnia magna
NOEC Chronic Algae / Aquatic Plants	0,32 mg/l

12.2. Persistence and degradability

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN

Solubility in water	0,1 - 100 mg/l

NOT rapidly degradable

POLYOXYCHYLENAMINE (polymer)
NOT rapidly degradable

12.3. Bioaccumulative potential

REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN

Partition coefficient: n-octanol/water	> 2,918
BCF	31

POLYOXYCHYLENAMINE (polymer)

Partition coefficient: n-octanol/water	1,34

12.4. Mobility in the soil

Information not available

12.5. Results of PBT and vPvB assessment
According to the available data, the product does not contain PBT or vPvB substances in a proportion ≥ 0.1%.

12.6. Endocrine-disrupting properties

According to the available data, the product does not contain any substances listed in the main European lists of potential or suspected endocrine disrupters 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. Product residues are to be regarded as special hazardous waste. The hazardousness of waste containing some of this product must be assessed in accordance with current legislation.
Disposal must be entrusted to an authorised waste management company, in accordance with national and possibly local regulations.
The transport of waste may be subject to ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in accordance with national waste management regulations.

SECTION 14. Transport information

14.1. UN or ID number

ADR / RID, IMDG, IATA: 3267

14.2. Official UN transport designation

ADR / RID:	LIQUIDO ORGANICO CORROSIVO, BASICO, N.A.S. (POLIOSSIALCHILENAMMINA (polymer))
IMDG:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLIOSSIALCHILENAMMINA (polymer))
IATA:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (POLIOSSIALCHILENAMMINA (polymer))

14.3. Transport hazard classes

ADR / RID:	Classe: 8	Etichetta: 8
IMDG:	Classe: 8	Etichetta: 8
IATA:	Classe: 8	Etichetta: 8

14.4. Packaging group

ADR / RID, IMDG, IATA: III

14.5. Environmental Hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 80	Limited Quantities:5 L	Tunnel restriction code: (E)
	Disposizione speciale: -		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Instructions Packaging: 856
	Pass.:	Maximum quantity: 5 L	Instructions Packaging: 852
	Disposizione speciale:	A3, A803	

14.7. Maritime transport in bulk according to IMO Acts

Not relevant information

SECTION 15. Regulatory Information

15.1. Safety, health and environmental regulations specific to the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions on the product or contained substances according to Annex XVII Regulation (EC) 1907/2006

Product

Point	3	

Substances contained

Point	75	REACTION PRODUCT: BISPHENOL-A-EPICHLOROHYDRIN

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Candidate List Substances (Art. 59 REACH)

According to the available data, the product does not contain SVHC substances in a proportion ≥ 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

Workers exposed to this chemical agent hazardous to health must be subject to health surveillance carried out in accordance with the provisions of Article 41 of Legislative Decree 81 of 9 April 2008, unless the risk to the safety and health of the worker has been assessed as insignificant, in accordance with Article 224(2).

15.2. Chemical Safety Assessment

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

SECTION 16. Other information

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

Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Severe eye injury, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitisation, category 1
Aquatic Chronic 2	Dangerous for the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Dangerous for the aquatic environment, chronic toxicity, category 3
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes severe eye irritation.
H315	Causes skin irritation.
H317	May cause allergic skin reaction.
H411	Toxic to aquatic organisms with long lasting effects.
H412	Harmful to aquatic organisms with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the Transport of Dangerous Goods by Road
- CAS: Chemical Abstract Service number
- EC: Identification number in ESIS (European Database of Existing Substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No-Effect Level- EC50: Concentration giving effect to 50% of the test population

- EmS: Emergency Schedule
- GHS: Globally Harmonised System for the Classification and Labelling of Chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulations
- IC50: Concentration of immobilisation of 50% of the test population
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX: Identification number in Annex VI of CLP
- LC50: 50% Lethal concentration
- LD50: 50% Lethal dose
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predicted Exposure Level
- PNEC: Predicted no-effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation for the International Carriage of Dangerous Goods by Rail
- STA: Acute Toxicity Estimate
- TLV: Threshold limit value
- TLV CEILING: Concentration not to be exceeded at any time during work 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 (All. II REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament (Atp. I CLP)
5. Regulation (EU) 286/2011 of the European Parliament (Atp. II CLP)
6. Regulation (EU) 618/2012 of the European Parliament (Atp. III 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)
22. Delegated Regulation (EU) 2022/692 (XVIII 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 Agency Website
- Database of model SDS of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note to the user:
The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and

completeness of the information in relation to the specific use of the product.
This document should not be construed as a guarantee of any specific product properties.
Since the use of the product is not under our direct control, it is the user's responsibility to observe the applicable laws and regulations regarding hygiene and safety. We accept no liability for improper use.
Adequate training must be provided to personnel handling chemicals.
CLASSIFICATION CALCULATION METHODS
Chemical-physical hazards: The classification of the product was derived from the criteria set out in the CLP Regulation Annex I Part 2. The methods for assessing chemical physical properties are given in section 9.
Health hazards: The classification of the product is based on the calculation methods of CLP Annex I Part 3, unless otherwise stated in section 11. Environmental hazards: The classification of the product is based on the calculation methods given in Annex I of CLP Part 4, unless otherwise stated in section 12.