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:	**C00041**
Product name	**RESINFIP EPOBOND C 100**
Chemical name and synonym	**UFI: QYD0-C0RX-Q007-JRQY**

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

Intended use	**sistema per ancoraggio ad iniezione**

1.3. Details of the supplier of the safety data sheet

Name	**Licata S.p.A.**
Full address	**Via De Gasperi,155**
District and Country	**92024 Canicatti (AG)**
	Italia
	Tel. +39 0922 856088
	Fax +39 0922 831427
e-mail address of the competent person responsible for the Safety Data Sheet	**controllo-qualita@licataspa.it**

1.4. Emergency telephone number

For urgent inquiries refer to	**NHS111in England: 111** **NHS24in Scotland: 111** **NHS Direct in Wales: 111 or 0845 4647** **In an emergency, if the patient has collapsed or is not breathing properly, call 999**

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:

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:

SECTION 2. Hazards identification ... / >>

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.

Precautionary statements:

P280	Wear protective gloves / eye protection / face protection.
P273	Avoid release to the environment.
P391	Collect spillage.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.

Contains: 1,3 propandiol 2 ethyl 2 (idrossimethil) polimero con (clorometil) ossirano
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 ≥ than 0,1%.

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification		**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
Epoxy resin (number average molecular weight <=700)			
INDEX	*603-074-00-8*	40 ≤ x < 42,5	**Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411**
EC	*500-033-5*		**Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%**
CAS	*25068-38-6*		
REACH Reg.	*01-2119456619-26-0000*		
1,3 propandiol 2 ethyl 2 (idrossimethil) polimero con (clorometil) ossirano			
INDEX		15 ≤ x < 16,5	**Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 3 H412**
EC			
CAS			

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.
In case of more severe symptoms, ask for immediate medical aid.
EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.
INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.
INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible

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

contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

If skin irritation or rash occurs: Get medical advice / attention.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

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. 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

Epoxy resin (number average molecular weight <=700)								
Predicted no-effect concentration - PNEC								
Normal value in fresh water						0,003	mg/l	
Normal value in marine water						0,0003	mg/l	
Normal value for fresh water sediment						0,5	mg/l/dwt	
Normal value for marine water sediment						0,5	mg/l/dwt	
Normal value for water, intermittent release						0,013	mg/l	
Normal value of STP microorganisms						10	mg/l	
Normal value for the terrestrial compartment						0,05	mg/l/dwt	
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	0,75 mg/m3	VND	0,75 mg/m3	VND	12,3 mg/m3	VND	12,3 mg/m3
Skin	VND	3,6 mg/kg/bw/d	VND	3,6 mg/kg/bw/d	VND	8,3 mg/kg/bw/d	VND	8,3 mg/kg/bw/d

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.

Epoxy resin (number average molecular weight <=700)
- Reaction product: bisphenol-A epoxy resin (average molecular weight <= 700) (CAS 25068-38-6):

DNEL / DMEL

Type Exposure Value Population Effects

DNEL Short 8.3 mg / kg Workers Systemic
term bw / day
Cutaneous

DNEL Short 12.3 mg / m³ Workers Systemic
term
Inhalation
DNEL Long 8.3 mg! Kg Workers Systemic
term bw / day
Cutaneous

DNEL Long 12.3 mg / m³ Workers Systemic
term
Inhalation

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

DNEL Short 3.6 mg / kg General Systemic
term bw / day
Cutaneous

DNEL Short 0.75 mg / mc General Systemic
term
Inalazione

DNEL Short 0.75 mg / kg General Systemic
term Oral bw / day

DNEL Long 3.6 mg! Kg General Systemic
term bw / day
Cutaneous

DNEL Long 0.75 mg / kg General Systemic
term
Inhalation

DNEL Long 0.75 mg / kg General Systemic
term Oral bw / day

Summary DNEL / DMEL: Not available

PNEC

Type Detail Value Method Detail

PNEC Fresh water 3 ug / l

PNEC Marino 0.3 ug / l

PNEC Treatment Plant 10 mg / l
wastewater

PNEC water sediment 0.5 mg / kg dwt
current

PNEC water sediment 0.5 mg / kg dwt
marine

PNEC sediment 00:05 mg / kg dwt

PNEC discontinuous release 0013 mg / l

PNEC Summary: Not available

Derivatives No Effect Levels (DNEL) and Planned No Effect Concentration (PNEC)

Explanatory note:
REACH requires manufacturers and importers to determine and indicate derivatives No Effect Levels (DNEL) for concentrations and Planned Without Effect (P EC) for environmental exposure. DNEL and P EC are established by the person making the recording process without official advice, and are not intended to be used directly to set the limits of exposure of the workplace or for the general population. Are primarily used as input values in the process of completion of quantitative risk assessment models (like the ECETOC-TRA). Because of differences in methodology of contact, the DNEL will tend to be lower (sometimes much) than other OEL based healthcare for chemicals. Moreover, despite DNEL (PNEC) are an indication to set measures to reduce risk, it should be recognized that these limits do not have the same rules apply as the OEL officially approved by the government.

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

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

Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.
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.
EYE PROTECTION
Wear airtight protective goggles (see standard EN ISO 16321).
RESPIRATORY PROTECTION
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. 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).
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.
Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

Epoxy resin (number average molecular weight <=700)
Appropriate technical controls

Does not require any special ventilation. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
If this product contains ingredients with exposure limits, use process enclosures, use of local exhaust ventilation or other control devices necessary to maintain worker exposure below recommended limits or statutory.

Individual protection measures

Hygiene measures

Before eating, smoking and using the lavatory and at the end of the work shift, wash hands, forearms and face thoroughly after handling chemical products. Appropriate techniques should be used to remove potentially contaminated clothing. The Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Make sure the shower and eyewash are close to the place where the work is performed.

Eye / face

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, sprays, gases or dust. If contact is possible, use the following protective equipment, unless the assessment indicates the need for a higher degree of protection: chemical splash goggles resistant to chemicals.

Skin protection

Hand Protection

Chemical-resistant gloves and waterproof comply with an approved standard should be worn when properly handled chemical products if a risk assessment indicates this is necessary.
Considering the parameters specified by the manufacturer of gloves, check during use that the gloves still maintain unchanged their properties protettive.Si Note that the breakthrough time for a
any of the constituent material of the glove can vary depending on the manufacturer of the guanto.Nel case of mixtures, composed of multiple substances, it is not possible to estimate in a precise way the protection time of
gloves.

Protection device Body

The personal protective equipment for the body should be selected according to a risk assessment indicates the task being performed and approved by a specialist before their use for the handling of this product.

Other protective skin

Appropriate footwear and any additional skin protection measures based on the task being performed and the risks involved. These choices must be approved by a specialist before
handling this product.

Respiratory protection

Use a respirator fitted, air-purifying or air complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, you must run fume scrubbers, filters or engineering modifications to the process equipment to reduce emissions to acceptable levels.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	not available	
Colour	not available	
Odour	not available	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not available	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,4 - 1,6	
Relative vapour density	not available	
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

Information not available

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.

10.2. Chemical stability

Excessively high temperatures can cause thermal decomposition.

10.3. Possibility of hazardous reactions

See paragraph 10.1.

10.4. Conditions to avoid

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

Avoid overheating.

Epoxy resin (number average molecular weight <=700)
Conditions to avoid: Heat.

10.5. Incompatible materials

Oxidising or reducing agents. Strong acids or bases.

Epoxy resin (number average molecular weight <=700)
Materials to avoid: Strong acids. Strong bases. Strong oxidizers. Amines.

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

Epoxy resin (number average molecular weight <=700)
- Reaction product: bisphenol-A epoxy resin (average molecular weight <= 700) (CAS 25068-38-6):

Acute toxicology

Remarks - Oral: It 'devoid of acute toxicity in several studies in the mouse and rat, LD50> 2000 mg / kg body weight.

Remarks - Inhalation: Due to the very low vapor pressure (saturated atmosphere = 0.008 ppb), it was not possible to make significant studies on the effects of inhalation acute.

Remarks - Dermal: In a study of rats according to standard OECD n. 402 the dermal LD50 was> 2000 mg / kg. In several studies of acute dermal toxicity rabbit LD50 was> 2000 mg / kg. In a study of rabbits was reported an LD50 value of 23 g / kg.

Conclusion / Summary: Not available

Estimates of acute toxicity: Not available

Irritation / Corrosion

Result Species Score Exposure Observation
Skin - Rabbit 1.5 - 2 -
Erythema / Eschar
404 Acute Dermal
IrritationiCorrosion

Skin - Edema Rabbit 404 1.0 - 1.5 -
Acute Dermal
IrritationiCorrosion

eyes - 405 Rabbit 0 -
Acute Eye
IrritationiCorrosion

eyes - Rabbit 0.7 -
Redness of
conjunctive

Skin - Rabbit 24 hrs -
Mildly
irritating

Skin - Severe Rabbit 24 hrs -
irritating

SECTION 11. Toxicological information ... / >>

Eyes - Mild Rabbit -
irritating

Conclusion / Summary Skin: Not available
eyes: Not available
Respiratory: Not available

Sensitization

Routes of exposure Species Result

Leather - -

In a study with mice LLNA conducted according to OECD n. 429, the EC3 estimated corresponded to a concentration of 5.7%; This result suggests that BADGE is a moderate skin sensitizer in this test system. In a study on guinea pig maximization according to OECD standard n. 406, BADGE induced a positive skin reaction in 100% of the experimental animals at a dose of stimulation with concentration of 50%. Therefore, BADGE is a skin sensitizer "extreme" in the conditions of this study. BADGE tested positive for skin sensitization in a study by the method of Buehler guinea pig conducted according to OECD standard n. 406.

Conclusion / Summary Skin: Not available
Respiratory: Not available

Mutagenecità

Test Experiment Result

- - -
In several studies showed that BADGE induces gene mutation test strains Ames / Salmonella TA 1535 and TA 100. In general, the mutagenic activity was greater without metabolic activation S9 liver. Induced gene mutation in mouse lymphoma L5178Y cells. Induced gene mutation and chromosomal damage in Chinese hamster V79 cells. Induced cell transformation in cells BI-IK Syrian hamster on the basis of the clonal growth in soft agar.
Did not induce evidence of chromosomal damage in a study with oral probe in a test on mouse dominant lethal conducted up to a high level of dosage of IO grams / kg and in a micronucleus test of mice led to a high dose of 5000 mglkg. egativo in a cytogenetic test spermatocitico on male mice treated for 5 days orally by gavage to a high dose of 3000 mglkg. Did not induce an increase in the frequency of damage chromosomes there in a cytogenetic test of bone marrow cells of Chinese hamster oral gavage up to a high dose of 3300 mglkg. Did not induce an increase of DNA strand breaks in cells of rat liver after treatment with oral gavage with 500 mglkg, measured by alkaline elution.

Conclusion / Summary: Not available

Carcinogenicity

Result Species Dose Exposure
- - - -

Remarks:
In a study with probe oral rat according to OECD standard n. 453 there was no evidence of carcinogenicity to the level of high dosage of 100 mglkg / day. Studies were conducted dermal exposure of male mice and female rats according to OECD standard n. 453. essuna evidence of carcinogenicity was observed in male mice treated up to the high dose of 100 mg / kg / day and female rats exposed to high dose of 1000 mg / kg / day.
. .
Conclusion / Summary: Not available

Reproductive toxicity

Conclusion / Summary: Not available

Teratogenicity

Result Species Dose Exposure

- - - -

Remarks:
BADGE did not induce any evidence of developmental toxicity in rats and rabbits exposed by gavage, orally or in rabbits following dermal, in accordance with OECD GLP studies n. 414. The studies with oral probe were conducted up to a high level of dosage of 180 mg / kg / day, which produced maternal toxicity on the basis of the reduction in body weight gain. The study of skin toxicity rabbit was conducted up to a high dose of 300 mg / kg / day which induced maternal toxicity on the basis of the reduction in body weight gain.

SECTION 11. Toxicological information ... / >>

Conclusion / Summary: Not available

Specific target organ toxicity (STOT) - single exposure: Not available

Specific target organ toxicity (STOT) - repeated exposure: Not available

Aspiration hazard: Not available

Information on likely routes of exposure: Not available

Potential acute health

Eye contact: Causes serious eye irritation.
Inhalation: No known significant effects or critical hazards.
Skin contact: Causes skin irritation. May cause an allergic skin reaction.
Ingestion: Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological

Eye contact: Adverse symptoms may include the following: pain or irritation watering redness. Adverse symptoms may include the following: pain or irritation watering redness
Inalazione: No specific data.
Skin contact: Adverse symptoms may include the following: irritation redness
Ingestion: No specific data.

Immediate, delayed and chronic effects from short and long-term exposure

Short-term exposure

Potential immediate effects: Not available
Potential delayed effects: Not available

Long term exposure

Potential immediate effects: Not available
Potential delayed effects: Not available

Potential chronic health

Conclusion / Summary: Not available

General: Once sensitized, a severe allergic reaction may occur as a result of a subsequent exposure to very low levels.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

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

SECTION 11. Toxicological information ... / >>

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)

Epoxy resin (number average molecular weight <=700)

LD50 (Oral):	11,4 mg/kg 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

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

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

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
"LC50 (96h): < 10 mg/l Daphnia
LC50 (96h): 1,5 mg/l Fish.".

Epoxy resin (number average molecular weight <=700)

LC50 - for Fish	1,3 mg/l/96h Fish- 203 Fish Acute Toxicity Test
EC50 - for Crustacea	2,1 mg/l/48h Daphnia - 202 Daphnia sp. Acute Immobilization Test and Reproduction Test
EC50 - for Algae / Aquatic Plants	> 11 mg/l/72h Alghe - Acuto

SECTION 12. Ecological information ... / >>

12.2. Persistence and degradability

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
Persistence and bioaccumulation: is not readily biodegradable.

Epoxy resin (number average molecular weight <=700)
Solubility in water 0,1 - 100 mg/l
NOT rapidly degradable

12.3. Bioaccumulative potential

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
Bioaccumulative potential: Slightly bioaccumulative. Log Pow = 3.6 - 3.8.

Epoxy resin (number average molecular weight <=700)
BCF 31

12.4. Mobility in soil

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
Mobility: Not volatile. Insoluble in water. Heavier than water.

12.5. Results of PBT and vPvB assessment

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
Bioaccumulation factor (BCF): 31_ Bioaccumulation: Not B-
Toxicity (T-): not T-
PBT: This substance is identified as a PBT substance.

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

12.6. Endocrine disrupting properties

Epoxy resin (number average molecular weight <=700)
Epoxy resins (number average molecular weight <= 700):
Other adverse effects: Toxic to aquatic organisms.

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

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.

Epoxy resin (number average molecular weight <=700)
- Reaction product: bisphenol-epicloridirina epoxy resin (molecular weight <700) (CAS 25068-38-6):

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the Environmental Protection Act and the enamel of the waste and the requirements of any regional local authority.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. The untreated waste should not be disposed of in the sewer system unless they fully comply with the requirements of each institution and legislation.

Hazardous waste:

The classification of the product may meet the criteria for a hazardous waste.

Packing
Methods enamels chin:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

Dispose of this material and its container must be with proper precautions. Care must be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: UN 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 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 ≤ 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 ≤ 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. (Epoxy resin (number average molecular weight ≤700))
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin (number average molecular weight ≤700))
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin (number average molecular weight ≤700))

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

SECTION 14. Transport information ... / >>

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 lt	Tunnel restriction code: (-)
	Special provision: 274, 335, 375, 601		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 lt	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Passengers:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197, A215	

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: E2

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

Product
Point 3
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 ≥ 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:

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.

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
- PBT: Persistent, bioaccumulative and toxic
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- 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) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) 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)
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

SECTION 16. Other information ... / >>

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)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
24. Delegated Regulation (UE) 2023/1435 (XX 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.

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:
01.