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:	**REPA**
Product name	**REPOSOL COMPONENT A**
UFI :	**KWYS-G58M-K243-EJYU**

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

Intended use	**Epoxy primer**

1.3. Details of the supplier of the safety data sheet

Name	**VOLTECO S.p.A**
Full address	**via delle industrie 47**
District and Country	**31050 Ponzano Veneto (TV)** **Italia** **Tel. 04229663**
e-mail address of the competent person responsible for the Safety Data Sheet	**volteco@volteco.it**

1.4. Emergency telephone number

For urgent inquiries refer to

+39 06 68593726 (CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA - Roma - 00165)
+39 800183459 (Az. Osp. Univ. Foggia - Foggia - 71222)
+39 081 7472870 (Az. Osp. "A. Cardarelli" - Napoli - 80131)
+39 06 49978000 (CAV Policlinico "Umberto I" - Roma - 161)
+39 06 3054343 (CAV Policlinico "A. Gemelli" - Roma - 168)
+39 055 7947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica - Firenze - 50134)
+39 0382 24444 (CAV Centro Nazionale di Informazione Tossicologica - Pavia - 27100)
+39 02 66101029 (Osp. Niguarda Ca' Granda - Milano - 20162)
+39 800883300 (Azienda Ospedaliera Papa Giovanni XXII - Bergamo - 24127)

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:

Reproductive toxicity, category 1B	H360F	May damage fertility.
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:

SECTION 2. Hazards identification ... / >>

Signal words: Danger

Hazard statements:

H360F	May damage fertility.
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.
	Restricted to professional users.

Precautionary statements:

P201	Obtain special instructions before use.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P273	Avoid release to the environment.
P391	Collect spillage.

Contains: oxirane, mono[(C12-14-alkyloxy)methyl] derivatives
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane
Reaction product:
bisphenol-F epichlorohydrin; resins
epoxy (weight
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)**
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane			
INDEX	*603-073-00-2*	50 ≤ x < 60	**Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411**
EC	*216-823-5*		**Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%**
CAS	*1675-54-3*		
REACH Reg.	*01-01-2119456619-26*		
Reaction product: bisphenol-F epichlorohydrin; resins epoxy (weight average molecular weight <= 700)			
INDEX		30 ≤ x < 40	**Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411**
EC	*701-263-0*		
CAS			
REACH Reg.	*01-2119454392-40*		
oxirane, mono[(C12-14-alkyloxy)methyl] derivatives			
INDEX	*603-103-00-4*	10 ≤ x < 20	**Repr. 1B H360F, Skin Irrit. 2 H315, Skin Sens. 1 H317**
EC	*271-846-8*		
CAS	*68609-97-2*		
REACH Reg.	*01-2119485289-22*		

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.
2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane
Protection of first responders: No action shall be taken involving any personal risk or without appropriate training. Performing mouth-to-mouth resuscitation can be dangerous for the person providing help. Wash the contaminated clothing thoroughly with water before removing it, or use gloves.

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 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.

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane
Potential acute health effects
Contact with eyes: causes serious eye irritation.
Inhalation: No known significant effects or critical hazards.
Contact with skin: causes skin irritation. May cause a skin reaction.
Ingestion: No known significant effects or critical hazards.

Signs/Symptoms of overexposure
Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness pain or irritation watering redness
Inhalation: no specific data.
Skin contact: Adverse symptoms may include the following: irritation, redness
Ingestion: no specific data.

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

IF exposed or concerned: 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
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

SECTION 5. Firefighting measures ... / >>

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

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. Use breathing equipment if powders are released into the air.

6.2. Environmental precautions

Avoid the formation of powder and dispersion of the product in the air.

6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. Make sure the leakage site is well aired. It may be advisable to wash with water any surfaces contaminated with traces of dust, without contaminating waste water.

6.4. Reference to other sections

Notify the competent authorities if the product has reached waterways or if it has contaminated the ground or vegetation.

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

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

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,0006	mg/l
Normal value for fresh water sediment	0,341	mg/kg/d
Normal value for marine water sediment	0,0341	mg/kg/d
Normal value of STP microorganisms	10	mg/l

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				0,5 mg/kg bw/d				
Inhalation				0,87 mg/m3				4,93 mg/m3
Skin				0,089 mg/kg bw/d				0,75 mg/kg bw/d

Reaction product: bisphenol-F epichlorohydrin; resins epoxy (weight 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	0,294	mg/kg/d
Normal value for marine water sediment	0,0294	mg/kg/d
Normal value for water, intermittent release	0,0254	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,237	mg/kg/d

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				6,25 mg/kg bw/d				
Inhalation				8,7 mg/m3				29,39 mg/m3
Skin				62,5 mg/kg bw/d	0,0083 mg/cm2			104,15 mg/kg bw/d

oxirane, mono[(C12-14-alkyloxy)methyl] derivatives

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0072	mg/l
Normal value in marine water	0,72	mg/l
Normal value for fresh water sediment	307,16	mg/kg/d
Normal value for marine water sediment	30,716	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	61,42	mg/kg/d

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				0,05 mg/kg bw/d				
Inhalation				0,087 mg/m3				0,49 mg/m3
Skin				0,089 mg/kg bw/d				0,75 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.

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

Derived No Effect Levels (DNELs) and Predicted No Effect Concentrations (PNECs)
Explanatory note: REACH requires manufacturers and importers to set and indicate Derived No-Effect Levels (DNELs) for and Predicted No-Effect Concentrations (PNECs) for environmental exposure. DNELs and PNECs are established by registrants without an official advisory process, and are not intended to be used directly to set workplace or general public exposure limits. They are primarily used as input values when carrying out quantitative risk assessment models (such as the ECETOC-TRA model). Due to differences in contact methodology, the DNEL will tend to be lower (sometimes significantly) than other health-based OELs for chemicals. Furthermore, although DNELs (and PNECs) are an indication for setting risk reduction measures, it should be recognized that these limits do not have the same regulatory application as the officially approved government OELs.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.
Provide an emergency shower with face and eye wash station.
HAND PROTECTION
Protect hands with category III work gloves.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, 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.

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane
Suitable engineering controls: no special ventilation is required. Good general ventilation should be sufficient to control workers' exposure to air pollutants. If this product contains ingredients with exposure limits, perform the process under containment conditions, use local exhaust ventilation or other control devices necessary to keep worker exposure below recommended or legally imposed limits.

Individual protection measures
Hygiene measures: before eating, smoking, using the bathroom and at the end of the work shift, wash your hands, arms and face thoroughly after touching chemical products. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing must not be taken out of the workplace. Wash the contaminated garments before reusing them.
Make sure that the emergency shower and eyewash are close to the place where the work is carried out.
Eye/face protection: Safety glasses complying with approved standards should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, sprays, gases or dusts. If contact is possible, use the following means of protection, unless the assessment indicates the need for a higher degree of protection: chemical resistant splash goggles.

Skin protection
Hand protection: Chemical resistant, impervious gloves complying with approved standards should always be used when handling chemicals if the risk assessment indicates this is necessary.
Considering the parameters specified by the glove manufacturer, check during use that the gloves still maintain their protective properties unaltered. Note that the breakthrough time for any glove material may vary depending on the glove manufacturer. of mixtures, composed of several substances, it is not possible to precisely estimate the protection time of the gloves.
Material: 730 Camatril
Minimum penetration time: 480 min
Material: 898 Butoject
Minimum penetration time: 480 min
Manufacturer: This recommendation is valid only for ours
product in delivery conditions. If this product will come
mixed with other substances, you will need to contact a supplier
EC approved protective gloves (e.g. KCL GmbH, D36124 Eichenzell, Tel. 0049 (0) 6659 87300, Fax. 0049 (0) 6659 87155, email: vertrieb@kcl.de).

Body protection equipment: personal protective equipment for the body must be chosen based on the risks foreseen for the task performed

and approved by qualified personnel before their use for handling this product.
Other skin protection devices: choose appropriate footwear and any additional skin protection measures based on the activity being carried out and the risks involved. Such choices must be approved by a specialist before handling this product.
Respiratory Protection: Based on the hazard and potential for exposure, select a respirator that meets appropriate standards and certification. Respirators must be used according to a respiratory protection program to ensure correct sizing, training and other important aspects of use. Use a custom-made air-purifying or fresh air respirator complying with approved standards if a risk assessment indicates this is necessary. Respirator selection should be based on known or anticipated exposure levels, product risks, and safe operating limits of the selected respirator.
Environmental exposure controls: Emissions from ventilation equipment or work processes should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, it will be necessary to perform flue gas scrubbing, add filters or make engineering changes to process equipment to reduce emissions to acceptable levels

General protective measures: Glasses or visors to protect against splashes of chemical materials. Chemical resistant gloves. Suitable protective footwear. Light protective clothing. Eye drop bottle with pure water.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties		Value		Information
Appearance		liquid		
Colour		straw yellow		
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	>	150 °C		
Auto-ignition temperature		400 °C		
Decomposition temperature		not available		
pH		not available		
Kinematic viscosity		not available		
Dynamic viscosity		0,7-1,1		Temperature: 25 °C
Solubility		not available		
Partition coefficient: n-octanol/water		not available		
Vapour pressure		not available		
Density and/or relative density		0,00112	kg/dm3	
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

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

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

10.4. Conditions to avoid

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

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.
It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane

LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	2000 mg/kg

Reaction product:
bisphenol-F epichlorohydrin; resins
epoxy (weight
average molecular weight <=
700)

LD50 (Dermal):	> 2000 mg/kg coniglio
LD50 (Oral):	> 2000 mg/kg ratto

oxirane, mono[(C12-14-
alkyloxy)methyl] derivatives

LD50 (Dermal):	> 4000 mg/kg Coniglio
LD50 (Oral):	26800 mg/kg Ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

SECTION 11. Toxicological information ... / >>

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

oxirane, mono[(C12-14-alkyloxy)methyl] derivatives
In a sensitization study with the Buehler method conducted according to the OTS 870.2600 test specification of the US EPA, positive skin reactions were observed in 20/20 guinea pigs. An extreme sensitizer in a guinea pig maximization test study conducted according to OECD Test Guideline No. 406.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

oxirane, mono[(C12-14-alkyloxy)methyl] derivatives
Positive in a bacterial mutation test conducted according to OECD test specification No. 471 in experimental Salmonella strain TA1535 with and without metabolic activation with S9. Negative in a HGPRT Chinese Hamster Ovary (CHO) cell gene mutation test conducted according to OECD Test Guideline No. 476 up to cytotoxic levels with and without metabolic activation with S9. Negative in a gene mutation assay on L5178Y/TK mouse lymphoma cells tested up to cytotoxic dose levels.
Negative for micronucleus induction (chromosomal damage) in a mouse study conducted according to OECD Regulation No. 474 up to a high intraperitoneal injection dose of 4.0 grams/kg. Negative in a rat bone marrow chromosomal aberration study conducted in a manner similar to OECD Test Guideline No. 475 by intraperitoneal injection, up to a high dose of approximately 700 mg/kg.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

May damage fertility

oxirane, mono[(C12-14-alkyloxy)methyl] derivatives
In a rat dermal toxicology study according to US EPA OTS Method 798.4420 and OECD Test Guideline No. 414, the NOAEL for both maternal and developmental adverse effects was greater than the high dose level of 200 mg/ kg/day.

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

2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane

EC50 - for Crustacea	1,8 mg/l/48h
EC50 - for Algae / Aquatic Plants	9,4 mg/l/72h

SECTION 12. Ecological information ... / >>

Reaction product:
bisphenol-F epichlorohydrin; resins
epoxy (weight
average molecular weight <=
700)

LC50 - for Fish	2,54 mg/l/96h
EC50 - for Crustacea	2,55 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 1000 mg/l/72h

oxirane, mono[(C12-14-
alkyloxy)methyl] derivatives

LC50 - for Fish	> 1800 mg/l/96h Rainbow trout,donaldson
EC50 - for Crustacea	7,2 mg/l/48h

12.2. Persistence and degradability

oxirane, mono[(C12-14-
alkyloxy)methyl] derivatives
Rapidly degradable

12.3. Bioaccumulative potential

oxirane, mono[(C12-14-
alkyloxy)methyl] derivatives

Partition coefficient: n-octanol/water	3,77
BCF	160

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

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. (2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane; Reaction product: bisphenol-F epichlorohydrin; resins epoxy (weight average molecular weight ≤ 700))

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane; Reaction product: bisphenol-F epichlorohydrin; resins epoxy (weight average molecular weight ≤ 700))

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane; Reaction product: bisphenol-F epichlorohydrin; resins epoxy (weight 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

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous

SECTION 14. Transport information ... / >>

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	2,2-bis-[4-(2,3-epoxypropoxy)phenyl]-propane REACH Reg.: 01-01-2119456619-26
Point	75	oxirane, mono[(C12-14-alkyloxy)methyl] derivatives REACH Reg.: 01-2119485289-22

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:

Repr. 1B	Reproductive toxicity, category 1B
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
H360F	May damage fertility.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

SECTION 16. Other information ... / >>

H411 Toxic 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
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

SECTION 16. Other information ... / >>

- 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:
02 / 03 / 04 / 08 / 11 / 12 / 14 / 15 / 16.