



## SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

### SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name : SR 740 ISOBOND  
Product code : 2722.  
EPOXY RESIN  
UFI : 8VT6-90GY-R00S-QH5S

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

Recommended use : Epoxy resin  
Uses advised against : data not available

#### 1.3. Details of the supplier of the safety data sheet

Registered company name : SICOMIN Composites.  
Address : 31 avenue de la Lardiere - BP 23.13161.Chateauneuf les Martigues.France.  
Telephone : +33 (0)4 42 42 30 20. Fax : +33 (0)4 42 81 29 29.  
composites@sicomin.com  
Site web : <http://www.sicomin.com>

#### 1.4. Emergency telephone number : +33 (0)1.45.42.59.59.

Association/Organisation : ORFILA - <http://www.centres-antipoison.net>.

#### Other emergency numbers

Health and Safety Executive (HSE) Chemicals Regulation Directorate - Telephone: +44 151 951 3317

### SECTION 2 : HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).  
Eye irritation, Category 2 (Eye Irrit. 2, H319).  
Skin sensitisation, Category 1 (Skin Sens. 1, H317).  
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

#### 2.2. Label elements

##### In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS09



GHS07

Signal Word :

WARNING

Product identifiers :

EC 216-823-5  
EC 607-873-2  
EC 701-263-0

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE  
POLY[OXY(METHYL-1,2-ETHANEDIYL)],A-(2-OXIRANYLMETHYL)-W-(2-OXIRANYLMETHOXY)-  
REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Additional labeling :

EUH205

Contains epoxy constituents. May produce an allergic reaction.

Hazard statements :

H315

Causes skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.
Precautionary statements - General :	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
Precautionary statements - Prevention :	
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...
Precautionary statements - Response :	
P391	Collect spillage.
Precautionary statements - Disposal :	
P501	Dispose of contents/container to hazardous waste.

### 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 59 of REACH: <http://echa.europa.eu/fr/candidate-list-table>  
The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.  
The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

#### Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 1675-54-3 EC: 216-823-5 REACH: 01-2119456619-26-XXXX  2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411		50 $\leq$ x % < 100
CAS: 26142-30-3 EC: 607-873-2  POLY[OXY(METHYL-1,2-ETHANEDIYL),A-(2-OXIRANYLMETHYL)-W-(2-OXIRANYLMETHOXY)-	GHS07 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319		10 $\leq$ x % < 25
EC: 701-263-0 REACH: 01-2119454392-40-XXXX  REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411		2.5 $\leq$ x % < 10
CAS: 67762-90-7 REACH: 01-2119379499-16-XXXX  SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA		[xiii]	2.5 $\leq$ x % < 10
ORGANIC PIGMENTS		[xiii]	0 $\leq$ x % < 0.1

#### Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 1675-54-3 EC: 216-823-5 REACH: 01-2119456619-26-XXXX  2,2'-[(1-METHYLETHYLIDENE)BIS(4	Skin Irrit. 2: H315 $\geq 5\%$ Eye Irrit. 2: H319 $C \geq 5\%$	dermal: ATE = 2000 mg/kg BW oral: ATE = 11400 mg/kg BW

,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE

**Nanoform**

Identification	Nanoform
CAS: 67762-90-7 REACH: 01-2119379499-16-XXXX	
SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA	
ORGANIC PIGMENTS	Name of nanoform(s): Organic pigments Number based particle size distribution: d10 : 1 - 200 nm d50 : 5 - 200 nm d90 : 10 - 330 nm Shape and aspect ratio of particles: Multimodal forms Specific surface area: 10 - 120 m <sup>2</sup> /g

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[xiii] Nanoform.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures****In the event of exposure by inhalation :**

If inhaled, move the patient into the fresh air and keep warm and at rest.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

Flush with large amounts of water. Remove contact lenses if the victim is. Continue to rinse. Seek medical attention if symptoms persist.

**In the event of splashes or contact with skin :**

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

**In the event of swallowing :**

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Seek medical attention immediately, showing the label.

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

No data available.

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

No data available.

**Information for the doctor :**

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to remain under medical supervision for 48 hours.

Contact a specialist for treatment poisoning if large quantities have been ingested or inhaled.

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media****Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- foam
- powder

### Unsuitable methods of extinction

In the event of a fire, do not use :  
- water jet

### 5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

### 5.3. Advice for firefighters

Firefighters should wear suitable protective clothing and a respirator mask with self- full operated in positive pressure mode.

Wear conform with the European standard EN 469.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

#### For non first aid worker

Avoid any contact with the skin and eyes.

#### For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

### 6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

### 6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

### 6.4. Reference to other sections

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

### 7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

#### Fire prevention :

Prevent access by unauthorised personnel.

#### Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid skin and eye contact with this mixture.

#### Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

### 7.2. Conditions for safe storage, including any incompatibilities

No data available.

#### Storage

Keep out of reach of children.

Store in original container protected from direct sunlight in a dry, cool and well ventilated area away from heat sources.

Keep container tightly closed in a dry place.

#### Packaging

Always keep in packaging made of an identical material to the original.

### 7.3. Specific end use(s)

Use : adhesives

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

No data available.

**Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

<b>Final use:</b>	<b>Workers.</b>
Exposure method:	Dermal contact.
Potential health effects:	Short term local effects.
DNEL :	8.3 µg of substance/cm2
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	104.15 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	29.39 mg of substance/m3

<b>Final use:</b>	<b>Man exposed via the environment.</b>
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	6.25 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	62.5 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	8.7 mg of substance/m3

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

<b>Final use:</b>	<b>Workers.</b>
Exposure method:	Dermal contact.
Potential health effects:	Short term systemic effects.
DNEL :	8.3 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	8.3 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Short term systemic effects.
DNEL :	12.3 mg of substance/m3
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	12.3 mg of substance/m3

<b>Final use:</b>	<b>Consumers.</b>
Exposure method:	Ingestion.
Potential health effects:	Short term systemic effects.
DNEL :	0.75 mg/kg body weight/day
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	0.75 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Short term systemic effects.
DNEL :	3.6 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.

DNEL : 3.6 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Short term systemic effects.  
DNEL : 0.75 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 0.75 mg of substance/m3

**Predicted no effect concentration (PNEC):**

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Environmental compartment: Soil.  
PNEC : 0.237 mg/kg

Environmental compartment: Fresh water.  
PNEC : 0.003 mg/l

Environmental compartment: Sea water.  
PNEC : 0.0003 mg/l

Environmental compartment: Intermittent waste water.  
PNEC : 0.0254 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.294 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.0294 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 10 mg/l

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Environmental compartment: Soil.  
PNEC : 0.065 mg/kg

Environmental compartment: Fresh water.  
PNEC : 6 µg/l

Environmental compartment: Sea water.  
PNEC : 1 µg/l

Environmental compartment: Intermittent waste water.  
PNEC : 0.013 mg/l

Environmental compartment: Fresh water sediment.  
PNEC : 0.341 mg/kg

Environmental compartment: Marine sediment.  
PNEC : 0.034 mg/kg

Environmental compartment: Waste water treatment plant.  
PNEC : 10 mg/l

**8.2. Exposure controls**

Use only with adequate ventilation or provided with ventilation at the source.

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard ISO 16321.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

#### - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN ISO 374-2 (Type B)

- Impervious gloves in accordance with standard EN ISO 374-2 (Type A)

#### - Body protection

Avoid skin contact.

Wear suitable protective clothing.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

Attention! If the protection group is insufficient.

Mask with filter type A, B, E, K, P for mixing with the hardener

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Physical state

Physical state :	Viscous liquid.
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aspect :	gel
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#### Colour

Color :	blue
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#### Odour

Odour threshold :	Not stated.
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#### Freezing point

Freezing point / Freezing range :	Not stated.
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#### Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.
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#### Flammability

Flammability (solid, gas) :	Not stated.
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#### Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
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Explosive properties, upper explosivity limit (%) :	Not stated.
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#### Flash point

Flash Point Interval :	FP > 100°C.
<b>Auto-ignition temperature</b>	
Self-ignition temperature :	Not relevant.
<b>Decomposition temperature</b>	
Decomposition point/decomposition range :	Not relevant.
<b>pH</b>	
pH (aqueous solution) :	Not stated.
pH :	Not relevant.
<b>Kinematic viscosity</b>	
Viscosity :	100 100 ± 20 000 mPa.s @ 25 °C
	Method for determining the viscosity :
	ISO 3219 (Plastics - Polymers/resins in the liquid state or as emulsions or dispersions - Determination of viscosity using a rotational viscometer with defined shear rate).
<b>Solubility</b>	
Water solubility :	Insoluble.
Fat solubility :	Not stated.
<b>Partition coefficient n-octanol/water (log value)</b>	
Partition coefficient: n-octanol/water :	Not stated.
<b>Vapour pressure</b>	
Vapour pressure (50°C) :	Not relevant.
<b>Density and/or relative density</b>	
Density :	1.17 ± 0.02 @ 20 °C
<b>Relative vapour density</b>	
Vapour density :	Not stated.
<b>Particle characteristics</b>	
The mixture contains one nanoform. See the characteristics of the particles that define the nanoform in Section 3.	
<b>9.2. Other information</b>	
Index of refraction :	1.5454 ± 0.002 @ 25 °C
	Method of determining the refractive index :
	NF ISO 280:1999 (T75-112)

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**SECTION 10 : STABILITY AND REACTIVITY****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :

- frost

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO<sub>2</sub>)**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****11.1.1. Substances**

**a) Acute toxicity :**

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Oral route : LD50 > 5000 mg/kg body weight  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)Dermal route : LD50 > 5000 mg/kg body weight  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)Inhalation route (Dusts/mist) : LC50 > 5.01 mg/l  
Species : Rat  
OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method)

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Oral route : LD50 > 2000 mg/kg body weight  
Species : RatDermal route : LD50 > 2000 mg/kg body weight  
Species : Rabbit

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) (CAS: 1675-54-3)

Oral route : LD50 = 11400 mg/kg body weight  
Species : RatDermal route : LD50 = 2000 mg/kg body weight  
Species : Rat**b) Skin corrosion/skin irritation :**

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) (CAS: 1675-54-3)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)**c) Serious damage to eyes/eye irritation :**

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Conjunctival redness : Average score = 0  
Species : RabbitConjunctival oedema : Average score = 0  
Species : Rabbit  
OECD Guideline 405 (Acute Eye Irritation / Corrosion)**d) Respiratory or skin sensitisation :**

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Buehler Test : Sensitiser.  
Species : Guinea pig

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Local lymph node stimulation test : Non-Sensitiser.  
Species : Mouse

OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Guinea Pig Maximisation Test (GMPT) :

Non-sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)**e) Germ cell mutagenicity :**REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANEMutagenesis (in vivo) : Negative.  
Species : Mouse

Species : Bacteria

Ames test (in vitro) :

Positive.

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

No mutagenic effect.

Mutagenesis (in vivo) :

Negative.  
Species : Rat  
OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

Mutagenesis (in vitro) :

Negative.  
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :

Negative.  
Species : E. coli WP2 uvrA**f) Carcinogenicity :**REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANECarcinogenicity Test : Negative.  
No carcinogenic effect.  
Species : Mouse  
Other guideline**g) Reproductive toxicant :**REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

No toxic effect for reproduction

Study on development : Species : Rabbit  
Other guideline**h) Specific target organ systemic toxicity - single exposure :**

No data available.

**i) Specific target organ systemic toxicity - repeated exposure :**

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Oral route : C >= 1000 mg/kg body weight/day  
Species : Rat  
Duration of exposure : 28 days**j) Aspiration hazard :**

No data available.

**11.1.2. Mixture****11.1.2.1 Information on hazard classes****a) Acute toxicity :**

Oral route : No data available.

Dermal route : No data available.

Inhalation route (Dusts/mist) : No data available.

**b) Skin corrosion/skin irritation :**

May cause reversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

**c) Serious damage to eyes/eye irritation :**

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

**d) Respiratory or skin sensitisation :**

May cause an allergic reaction by skin contact.

Contains epoxy compounds. May cause an allergic reaction.

**e) Germ cell mutagenicity :**

No data available.

**f) Carcinogenicity :**

No data available.

**g) Reproductive toxicant :**

No data available.

**h) Specific target organ systemic toxicity - single exposure :**

No data available.

**i) Specific target organ systemic toxicity - repeated exposure :**

No data available.

**j) Aspiration hazard :**

No data available.

**11.1.2.2 Other information**

**Symptoms related to the physical, chemical and toxicological characteristics**

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and a respiratory tract sensitiser as well as an irritant.

Constituents with a low molecular weight irritate the eyes, mucous membranes and the skin

Repeated contact with the skin may cause irritation and hypersensitisation, possibly in combination with other epoxide compounds.

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 1675-54-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

**11.2. Information on other hazards**

**Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

**SECTION 12 : ECOLOGICAL INFORMATION**

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Fish toxicity : LC50 = 1.3 mg/l  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity : EC50 = 2.1 mg/l  
Species : Daphnia sp.  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

NOEC = 0.3 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 jours  
OCDE Ligne directrice 211 (Daphnia magna, essai de reproduction)

Algae toxicity : ECr50 > 11 mg/l  
Duration of exposure : 72 h

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Fish toxicity : LC50 > 10000 mg/l

Species : Brachydanio rerio  
Duration of exposure : 96 h  
OCDE Ligne directrice 203 (Poisson, essai de toxicité aiguë)

Crustacean toxicity :  
EC50 > 1000 mg/l  
Species : Daphnia magna  
Duration of exposure : 24 h  
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

Species : Daphnia magna

Algae toxicity :  
ECr50 > 173 mg/l  
Species : Desmodesmus subspicatus  
Duration of exposure : 72 h  
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Fish toxicity :  
LC50 = 2.54 mg/l  
Duration of exposure : 96 h

Crustacean toxicity :  
EC50 = 2.55 mg/l  
Species : Daphnia sp.  
Duration of exposure : 48 h  
OCDE Ligne directrice 202 (Daphnia sp., essai d'immobilisation immédiate)

Algae toxicity :  
ECr50 > 1000 mg/l  
Species : Selenastrum capricornutum  
Duration of exposure : 72 h  
OCDE Ligne directrice 201 (Algues, Essai d'inhibition de la croissance)

### 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

### 12.2. Persistence and degradability

#### 12.2.1. Substances

SILICONES AND SILOXANES, DIMETHYL REACTION PRODUCTS WITH SILICA (CAS: 67762-90-7)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND  
2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Biodegradability : Non-rapidly degradable.

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

### 12.3. Bioaccumulative potential

#### 12.3.1. Substances

REACTION MASS OF 2,2'-[METHYLENEBIS(2,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND

2,2'-[METHYLENEBIS(4,1-PHENYLENEOXYMETHYLENE)]BIS(OXIRANE) AND 2-({2-[4-(OXIRAN-2-YLMETHOXY)BENZYL]PHENOXY}METHYL)OXIRANE

Octanol/water partition coefficient : log K<sub>ow</sub> = 3.3

Bioaccumulation : BCF = 150

2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE (CAS: 1675-54-3)

Octanol/water partition coefficient : log K<sub>ow</sub> ≤ 3.78

Bioaccumulation : BCF < 100.

### 12.4. Mobility in soil

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

**12.7. Other adverse effects**

No data available.

**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

**Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :**

07 01 08 \* other still bottoms and reaction residues

**SECTION 14 : TRANSPORT INFORMATION**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2025 - IMDG 2024 [42-24] - ICAO/IATA 2025 [66]).

**14.1. UN number or ID number**

3082

**14.2. UN proper shipping name**

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, reaction mass of

2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and

2-([2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy]methyl)oxirane)

**14.3. Transport hazard class(es)**

- Classification :



9

**14.4. Packing group**

III

**14.5. Environmental hazards**

- Environmentally hazardous material :

**14.6. Special precautions for user**

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 375 601 650	E1	3	-

\*Not subject to this regulation if Q ≤ 5 l / 5 kg (ADR 3.3.1 - DS 375)

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregati

	9	-	III	5 L	F-A, S-F	274 335 375 969	E1	Handling Category A	on -
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\*Not subject to this regulation if Q ≤ 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158 A197 A215	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197 A215	E1

\*Not subject to this regulation if Q ≤ 5 l / 5 kg (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(2,2'-[[1-methylethylidene]bis(4,1-phenyleneoxymethylene)]bisoxirane)

#### 14.7. Maritime transport in bulk according to IMO instruments

No data available.

## SECTION 15 : REGULATORY INFORMATION

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

#### Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

#### Container information:

No data available.

#### Particular provisions :

No data available.

#### Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

#### Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006:  
<https://echa.europa.eu/fr/authorisation-list>.

#### Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

The mixture does not contain any substance posing a risk to the ozone layer.

#### Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

#### PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is not subject to the Prior Informed Consent (PIC) procedure.

#### Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

#### 15.2. Chemical safety assessment

No data available.

## SECTION 16 : OTHER INFORMATION

### Wording of the phrases mentioned in section 3 :

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.  
 LC50 : The concentration of a test substance resulting in 50% lethality in a given period.  
 EC50 : The effective concentration of substance that causes 50% of the maximum response.  
 ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.  
 LQ : Limited Quantity  
 EQ : Excepted Quantity  
 EmS : Emergency Schedule  
 E : Packing Instruction

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

ADR : Agreement concerning the international carriage of dangerous goods by road.

GHS07 : Exclamation mark

GHS09 : Environment

IATA : International Air Transport Association.

IMDG : International Maritime Dangerous Goods.

ICAO : International Civil Aviation Organisation

PBT: Persistent, bioaccumulable and toxic.

PIC: Prior Informed Consent.

POP: Persistent Organic Pollutant.

RID : Regulations concerning the International carriage of Dangerous goods by rail.

SVHC : Substances of very high concern.

WGK : Wassergefährdungsklasse (Water Hazard Class).

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The information contained in this safety data sheet is based on our current knowledge at the time of publication and is provided in good faith. It does not constitute any guarantee of specific product properties nor establish any contractual relationship. The user remains solely responsible for safe and compliant use of the product in accordance with current regulations.  
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