

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878

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

#### 1.1. Product identifier

Code: **21X**  
Product name: **MALTA BASE (A)**  
UFI: **6ED0-Q0S2-800Q-YDFE**

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

Intended use: **BI-COMPONENT EPOXY BINDER FOR QUARTZ MORTARS**

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

Name: **NORD RESINE S.p.A.**  
Full address: **Via Fornace Vecchia, 79**  
District and Country: **31058 Susegana (TV)  
Italia**  
Tel.: **+39 0438-437511**  
Fax: **+39 0438-435155**

e-mail address of the competent person responsible for the Safety Data Sheet: **annabreda@nordresine.com**

Supplier: **NORD RESINE S.p.A.**

#### 1.4. Emergency telephone number

For urgent inquiries refer to:

**Ireland**  
**National Poisons Information Centre**  
**+353 018092166**  
**+353 018092566**

**Malta**  
**Malta Competition and Consumer Affairs Authority (MCCAA)**  
**+356 2395 2000**

**Belgium**  
**Centre Antipoisons: +32 022649636**

**Germany**  
**BfR Bundesinstitut für Risikobewertung: +49 30184120**

**Netherlands**  
**National Poisons Information Center / University Medical Center Utrecht**  
**+31 88 75 585 61**

**Croatia**  
**Croatian Institute of Public Health, Division for Toxicology: +38514686910**

**Sveden**  
**Swedish Poisons Information Centre: +46104566750**

### 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.

**SECTION 2. Hazards identification** ... / >>

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:



Signal words: **Danger**

Hazard statements:

<b>H360F</b>	May damage fertility.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

Precautionary statements:

<b>P201</b>	Obtain special instructions before use.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.
<b>P308+P313</b>	IF exposed or concerned: Get medical advice / attention.
<b>P273</b>	Avoid release to the environment.
<b>P391</b>	Collect spillage.
<b>P261</b>	Avoid breathing dust.

**Contains:** oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
bis-[4-(2,3-epoxipropoxy)phenyl]propane  
Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
[2-{{2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl}oxirane and  
[2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Product not intended for uses provided for by Directive 2004/42/EC.

**2.3. Other hazards**

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

**SECTION 3. Composition/information on ingredients**

### SECTION 3. Composition/information on ingredients ... / >>

#### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>bis-[4-(2,3-epoxipropoxy)phenyl]propane</b>		
INDEX	603-073-00-2    50 ≤ x < 75	<b>Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411</b>
EC	216-823-5	<b>Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%</b>
CAS	1675-54-3	
REACH Reg.	01-2119456619-26	
<b>Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane</b>		
INDEX	25 ≤ x < 35	<b>Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 2 H411</b>
EC	701-263-0	
CAS		
REACH Reg.	01-2119454392-40	
<b>oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</b>		
INDEX	603-103-00-4    15 ≤ x < 20	<b>Repr. 1B H360F, Skin Irrit. 2 H315, Skin Sens. 1 H317</b>
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.

#### 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.

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

IF exposed or concerned: Get medical advice / attention.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment: see section 4.1

#### 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

#### oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0072	mg/l
Normal value in marine water	0,00072	mg/l
Normal value for fresh water sediment	66,77	mg/kg
Normal value for marine water sediment	6,677	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	80,12	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		1,219 mg/kg bw/d		1 mg/kg bw/d				
Inhalation	2,9 mg/m3	7,6 mg/m3	1,46 mg/m3	4,1 mg/m3	9,8 mg/m3	29 mg/m3	0,98 mg/m3	13,8 mg/m3
Skin	40 mg/kg bw/d	10 mg/kg bw/d	1 mg/kg bw/d	2,35 mg/kg bw/d	68 mg/kg bw/d	17 mg/kg bw/d	1,7 mg/kg bw/d	3,9 mg/kg bw/d

#### Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,003	mg/l
Normal value for fresh water sediment	0,294	mg/kg
Normal value for marine water sediment	0,029	mg/kg
Normal value for water, intermittent release	0,025	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,237	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	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

#### bis-[4-(2,3-epoxipropoxy)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	0,996	mg/kg
Normal value for marine water sediment	0,0996	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	0,75 mg/kg/d				
Inhalation							VND	12,25 mg/m3
Skin			VND	3,571 mg/kg/d			VND	8,33 mg/kg

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 ... / >>

### 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.

Protect your hands with gloves of the following type:

Material: Nitrile rubber (NBR)

Thickness: > 0,35 mm

Breakthrough time: 480 min

Material: Butyl rubber (IIR)

Thickness: > 0,5 mm

Breakthrough time: 480 min

#### 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.

## SECTION 9. Physical and chemical properties

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

Properties	Value	Information
Appearance	liquid	
Colour	LIGHT YELLOW	
Odour	characteristic	
Odour threshold	not determined	Reason for missing data: not determined
Melting point / freezing point	not determined	Reason for missing data: not determined
Initial boiling point	> 200 °C	
Flammability	not determined	
Lower explosive limit	not determined	Reason for missing data: not determined
Upper explosive limit	not determined	Reason for missing data: not determined
Flash point	> 150 °C	
Auto-ignition temperature	> 200 °C	
Decomposition temperature	not determined	Reason for missing data: not determined
pH	not available	
Kinematic viscosity	not determined	Reason for missing data: not determined
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure	< 2 hPa	Temperature: 20 °C
Density and/or relative density	1,14 kg/l	Method: EN ISO 1675
Relative vapour density	not determined	Reason for missing data: not determined
Particle characteristics	not applicable	

**SECTION 9. Physical and chemical properties** ... / >>

**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**

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)

**SECTION 11. Toxicological information ... / >>**

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
 [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 LD50 (Dermal): > 2000 mg/kg Rat  
 LD50 (Oral): > 5000 mg/kg Rat

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
 LD50 (Dermal): > 10000 mg/kg Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
 [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 The skin irritation of bisphenol F diglycidyl ether was determined to be mild to non-irritating based on the six Klimisch 1 and 2 studies  
 conducted according to OECD guidelines.  
 In the experimental conditions used, only one product induced erythema and edema reactions above the significance threshold  
 (score 2 for erythema or edema) and was classified as irritant according to EEC directive no. 83/467/1983. The other studies  
 indicated mild irritation, but not sufficient to reach the classification threshold.  
 Two repeated dose cumulative irritation studies were performed and under the experimental conditions employed the test materials  
 induced significant irritation after repeated application and a potential for cumulative skin irritation was found in albino rabbits.  
 Effects on skin irritation/corrosion: slightly irritating.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
 [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 The ocular irritation of bisphenol F diglycidyl ether was determined to be non-irritating based on the four Klimisch 1 and 2 studies  
 conducted according to OECD guidelines. In rabbit eye irritation tests, 0.1 ml of the test material caused no irritation and no initial  
 pain response.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Skin sensitization

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
 [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
 Bisphenol F diglycidyl ether (BPF DGE) tested positive for induction of skin sensitization in the mouse Local Lymph Node Assay  
 (LLNA). Based on an EC3 value of 0.7%, BPF DGE is considered a strong skin sensitizer. According to ECHA guidelines, this EC3  
 value was converted to an EC3 value of 175 ug/cm2 and is considered the LOAEL for the induction of skin sensitization in the LLNA  
 mouse for BPF DGE. From sensitization tests it can be concluded that BPF DGE is a sensitizer.

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

May damage fertility

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### SECTION 11. Toxicological information ... / >>

#### 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

bis-[4-(2,3-epoxipropoxy)phenyl]propane  
LC50 - for Fish 1,5 mg/l/96h Fish

Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and  
[2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane  
LC50 - for Fish 2,54 mg/l/96h  
EC50 - for Crustacea 2,55 mg/l/48h Daphnia Magna  
EC50 - for Algae / Aquatic Plants 1,8 mg/l/72h

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
LC50 - for Fish > 5000 mg/l/96h Rainbow trout

#### 12.2. Persistence and degradability

bis-[4-(2,3-epoxipropoxy)phenyl]propane  
Solubility in water 0,1 - 100 mg/l  
NOT rapidly degradable

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
Solubility in water 0,483 mg/l

#### 12.3. Bioaccumulative potential

bis-[4-(2,3-epoxipropoxy)phenyl]propane  
Partition coefficient: n-octanol/water > 2,918  
BCF 31

oxirane, mono[(C12-14-alkyloxy)methyl] derivs.  
Partition coefficient: n-octanol/water 6 Log Kow  
BCF 263

#### 12.4. Mobility in soil

bis-[4-(2,3-epoxipropoxy)phenyl]propane  
Partition coefficient: soil/water 2,65

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  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.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

CONTAMINATED PACKAGING

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

## 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. (bis-[4-(2,3-epoxipropoxi)phenyl]propane; Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane )

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane; Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane )

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane; Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane )

### 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, 650		
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  $\geq$  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 been performed for the following contained substances  
bis-[4-(2,3-epoxipropoxy)phenyl]propane

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Repr. 1B</b>	Reproductive toxicity, category 1B
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H360F</b>	May damage fertility.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H411</b>	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)

**SECTION 16. Other information** ... / >>

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)
25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
27. Delegated Regulation (UE) 2024/2564 (XXII 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:

02 / 04 / 08 / 09 / 13 / 14.