

Material Safety Data Sheet 93 / 112 / CEE

1- Product and company identification

Trade name: **EXL 1603**
Curing agent for epoxy resin

Manufacturer / Supplier:

SICOMIN Composites
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13 161 Châteauneuf-les-Martigues Cédex -France-
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2- Composition / Information on ingredients

Chemical characterization: Polyamines blend

| CAS Number | Chemical Name | CE Number | % | Symbol | Risk Classification |
|------------|----------------------------------|-----------|---------|--------|---------------------|
| 9046-10-0 | Alkylether polyamin ¹ | Polymer | 30 - 60 | C | 34 |
| 2855-13-2 | Isophorone diamin | / | 5 - 20 | C | 21/22 34 43 |
| 68131-73-7 | Polyethylenamin | | 10 - 30 | C,N | 21/22 34 43 50/53 |

1: Poly(oxy(méthyl-1,2-ethanediyl)), alpha-(2-aminomethylethyl) omega-(2-aminoethylethoxy)

3- Hazards Identification



C: Corrosive

- R 21/22 Harmful by skin contact and if swallowed
R 34: Causes burns
R 43: May cause sensitization by skin contact
R 50/53 Toxic to aquatic organism, may cause long term adverse effects in aquatic environment

Signs and symptoms of exposure (Possible longer term effects):

Repeated and/or prolonged exposures may result in : adverse respiratory effects (such as cough, tightness of chest or shortness of breath); adverse skin effects (such as defatting, rash, irritation or corrosion); adverse eye effects (such as conjunctivitis or corneal damage).

4- First aid measures

Signs and symptoms of exposure (acute effects)

Eye contact:

Rinse immediately with plenty of water for at least 15'. Get medical attention.

Skin contact:

Immediately remove contaminated clothing. Remove the excess and wash with water and soap.

Get medical attention.

Ingestion:

Do not induce vomiting. Consult immediately a physician

Inhalation:

Remove from the contaminated area and keep warm and at rest.

5- Fire fighting measures

Suitable extinguishing agents:

Powder CO₂, foam. Cool the containers with water spray

Products to avoid:

ND

Products of combustion will include:

Poison gas as nitrogen gas (NO_x), carbon monoxide (CO)

Protective equipment:

Use breathing apparatus

6- Accidental release measures

Individual precautions:

Use gloves, goggles, masks and protective clothing
Use breathing equipment if the area is narrow, keep fire sources away

Environmental precautions:

Keep the product away from superficial and underground water. In the event of product entering waters or drainage system or pollution soil or plants, informing fire service or police.

Cleaning procedures:

Soak up inert material in accordance with law regulations. Wash with water & detergents.

7- Handling and storing

Handling:

Use personal protection (see point 8). Provide adequate ventilation. Avoid inhalation vapours.

Storing:

2 years, if stored in well ventilated area, in close containers.
The product is sensitive to CO₂ and humidity.

8- Exposure controls / personal protection

Precautionary measures:

Provide adequate ventilation

Respiratory protection:

Necessary in case the area is not well ventilated: mask with adequate filters

Hand protection:

Use appropriate gloves

Eyes protection:

Wear goggles or a face visor

Skin protection:

Use protective clothing, exercising reasonable personal cleanliness

9- Chemical / Physical properties

| | |
|--------------------------------|--------------------------------------|
| Appearance | : Liquid |
| Colour | : Yellow to red |
| Odour | : Ammoniacal |
| Ph | : Alkaline |
| Boiling point | : > 100 °C |
| Flash point | : > 100°C |
| Solubility in water | : Partially soluble |
| Solubility in organic solvents | : Alcohols and aromatic hydrocarbons |
| Specific gravity (Kg / l 20°C) | : 0.984 ± 0.005 |
| Viscosity (mPa.s 25°C) | : 50 ± 5 |
| Vapour pressure (mbar 20°C) | : 0.02 |

10- Stability and reactivity data

Precautions: ND

Materials to avoid:

Acids, strong oxidizers, epoxides, ketones

Hazardous decomposition products:

In case of fire, the product may develop toxic gas as nitrous gas (NO_x), carbon monoxide (CO), etc..

11- Toxicological information

Consider the concentration of each substance to evaluate toxicological effects caused by exposure

| Cas number | Inhalation LD 50 (rat) mg / l / 4h | Ingestion LD 50 (rat) mg/kg | Skin contact LD 50 (rabbit) mg/kg | Long term effect Skin cobaye |
|------------|--|-----------------------------------|---|---------------------------------|
| 9046-10-0 | nd | 2855 | 2980 | no sensitization |
| 2855-13-2 | nd | 1030 | nd | sensitization |
| 68131-73-7 | Toxic | 1400-2000 | corrosive | sensitization |

Ingestion:

Corrosive. May cause burns of mouth and severe gastrointestinal trouble.

Skin absorption:

Prolonged or widespread exposure may result in the absorption of potentially harmful amounts of material.

May cause chemical burns and develop skin allergy.

Inhalation:

Vapours are irritating and may develop allergy.

Eye contact:

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness.

12- Ecological Information

General notes:

Do not empty into drains

13- Disposal considerations

Dispose of in accordance with local and national regulations

14- Transport Information

| | | | |
|------------------------------------|---|-----------|--------------------------------|
| Correct technical name: | Liquid polyamines, corrosives, nos | | |
| Content: | Alkylether polyamin, Isophoron diamin, Polyethyleneamin | | |
| ONUN°: | 2735 | | |
| Air transport - OACI / IATA | Class 8 49 CFR 171.11 | Group: II | FP : > 100°C |
| Sea transport - IMDG | Class 8 N° EMS: 8-05 | Group: II | IMDG page: 8109.2 MFAG: 320 |
| Road transport - ADR / RID | Class 8, 53(b) | | HI/Kemler n°: 80 |

15- Regulatory information

Label EEC:

Regulation 88 / 379

Hazard symbol:

C Corrosive

Risk Phrases :

R 21/22 Harmful by skin contact and if swallowed
 R 34: Causes burns
 R 43: May cause sensitization by skin contact
 R 50/53

Safety Phrases:

- S 22: Don't breathe vapor / aerosol
- S 26: In case of contact with eye, rinse immediatly with plenty of water and seek medical advice
- S 36/37/39: Wear suitable protective clothing, gloves, and eye face protection
- S 38: In case the area is not well ventilated: mask with adequate filters
- S 46 In case of accident or if you feel unwell, seek medical advice

16-Other information

Note:

The information herein is given in good faith and to the best of our knowledge but no warranty, express or implied, is made. Since the use of this information and the conditions of use of the product are not within our control, it is the user's obligation to determine the condition of safe use of the products.

NA: Not applicable ND: Not determined

Department issuing data specification sheet / Contact:

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