

Material Safety Data Sheet 93 / 112 / CEE

1- Product and company identification

Trade name: **SD 544.21**
Curing agent for epoxy resin

Manufacturer / Supplier:

SICOMIN Composites
RN 568 Quartier la Moutte BP 23
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2- Composition / Information on ingredients

Chemical characterization: Polyamines blend

CAS Number	Chemical Name	CE Number	%	Symbol	Risk Classification
39423-51-3	Alkylether polyamin ¹	500-105-6	< 10	C	21/22 34
2855-13-2	Isophorone diamin	/	< 50	C	21/22 34 43
101-77-9	4,4'- Diaminodiphenylmethane (DDM)		< 40	T	45 48/20/21/22 43

1: Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-(2-aminomethylethoxy)- ether react with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol

3- Hazards Identification



C: Corrosive



T: Toxic

- R 45: Contain material wich may cause cancer
R 48/2021/22: Harmful by eye contact, skin contact and if swallowed. May cause allergic skin reaction.
R 34: Causes burns
R 43: May cause sensitization by skin contact

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

Contains material wich may cause liver, kidney, blood and spleen damage (based on animal data)
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:

Immediatly 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 (NOx), 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, $18 < T_a < 25 \text{ }^\circ\text{C}$
- The product is sensitive to CO_2 and humidity.

8- Exposure controls / personal protection

Precautionary measures:

- Provide adequate ventilation
- Cas 101-77-9: TWA (0.01ppm/0.088 mg/m³), STEL (0.1 ppm, 0.88 mg/m³)

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	: Amoniacal
Ph	: Alkaline
Boiling point	: $> 100 \text{ }^\circ\text{C}$
Flash point	: $> 100^\circ\text{C}$
Solubility in water	: Partially soluble
Solubility in organic solvents	: Alcohols and aromatic hydrocarbons
Specific gravity (Kg / l 20°C)	: 1.03 ± 0.01
Viscosity (mPa.s 25°C)	: 500 ± 50
Vapour pressure (mbar 20°C)	: 0.02

10- Stability and reactivity data

Precautions: ND

Materials to avoid:

- Acids, strong oxidizers, epoxidies, 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
101-77-9	nd	375 (female)	1600	nd
2855-13-2	nd	1030	nd	sensitization
39423-51-3	nd	220	562	no sensitization

Contains material wich may cause liver, kidney, blood and spleen damage (based on animal data)

Ingestion:

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

Skin absorption:

Prolonged of 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 wich 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
ONU N°: 2927

Air transport - OACI / IATA Class 6.1 Group: II FP : > 100°C

Sea transport - IMDG Class 6.1 Group: II IMDG page: 6270.2

Road transport - ADR / RID Class 6.1 Classe: 12c)

15- Regulatory information

Label EEC:

Regulation 88 / 379

Hazard symbol:

T, C Toxic, Corrosive

Risk Phrases :

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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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