

1- Product and company identification

Trade name: **CO44**
Curing agent for epoxy resin

Manufacturer / Supplier:

SICOMIN Composites RN 568 Quartier la Moutte BP 23
13 161 Châteauneuf-les-Martigues Cédex -France-
Tél: 33.04.42.42.30.20 Fax: 33.04.42.81.29.29 composites@sicomin.com

2- Composition / Information on ingredients

Chemical characterization: Polyamines blend in benzyl alcohol

Chemical Name	Cas number	%	Symbol	Risk Classification
Polyethylenamine	26336-38-9	45	C,N	21/22 34 43 50/53
m-Xylene diamine XDA	1477-55-0	20	C	20/22 34 43
Bisphenol A	80-05-7	20	Xi	36/37/38 43
Benzyl alcohol	100-51-6	15	Xn	20/22

3- Hazards Identification



C: Corrosive

- R 20/21/22 Harmful by inhalation, in contact with skin, and if swallowed
- R 34: Causes burns
- R 43: May cause sensitization by skin contact
- R 50/53 Very toxic to aquatic organisms, 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. Drink lot of water. 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), ammoniac NH₃, 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:

- Store 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
- CAS 1477-55-0: VME 0.1 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	: Ammoniacal	
Ph	: 11, Alkaline	ISO 8975
Boiling point	: > 200 °C	DIN 53171
Flash point	: > 100°C	DIN 51758
Solubility in water	: Partially soluble	
Solubility in organic solvents	: Alcohols and aromatic hydrocarbons	
Specific gravity (Kg / l 20°C)	: 1.05 + 0.05	ISO 2811
Viscosity (mPa.s 25°C)	: 600 + 100	ISO 9371
Pression de vapeur (mm Hg à 25°C)	: < 0.1 mbar	

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), NH_x, 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
26336-38-9	nd	2240	nd	nd
1477-55-0	2.4	1040	nd	nd
100-51-6	>1000	1600	2980	nd
80-05-7	nd	3300	3000	no irritating

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

CAS 26336-38-9 LCO 96 h / Brachydanio rerio: 100 mg/l
 ECO Pseudomonas putida: 1000 mg/l

13- Disposal considerations

Dispose of in accordance with local and national regulations

14- Transport Information

Correct technical name: Amines, liquid, corrosive, nos
 Content: m-Xylenediamin, polyethylenamin
 N° UN: 2735

Air transport - OACI / IATA Class 8 Group: III

Sea transport - IMDG Class 8 Group: III IMDG page: 8109.2
 N° EMS: 8-05 MFAG: 320 Marine pollutant: yes

Road transport - ADR / RID Class 8, 53(c) HI/Kemler n°: 80 label: 8

15- Regulatory information

Label EEC:

Regulation 88 / 379

Hazard symbol:

C Corrosive

Risk Phrases :

R 20/21/22 Harmful by inhalation, in contact with skin, and if swallowed

R 34: Causes burns

R 43: May cause sensitization by skin contact

R 50/53 Very toxic to aquatic organisms, may cause long term adverse effects in aquatic environment

Safety Phrases:

- 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
- S 61 Avoid release to the environment. Refer to special instructions / safety data sheets

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:

Tel: 33.04.42.42.30.20 Fax: 33.04.42.81.29.29 composites@sicomin.com