

1 Identification of substance:

- **Product details:**
- **Trade name:** EPIKURE™ Curing Agent MGS LH 386
- **Article number:** 16S-00477/1
- **Application of the substance / the preparation**
Epoxy resin systems
Hardener / Curing agent
- **Manufacturer/Supplier:**
Hexion Specialty Chemicals B.V.
Postbus 606
3190 AN Hoogvliet Rt.
Netherlands
Tel.: +31 65 25 11 07 9
- **Information:**
see: Section 16 (Contact)
E-Mail: eckhard.ruehle@hexion.com
- **Emergency information:**
Emergency telephone number:
CARECHEM24
+44 (0) 2087 628322

2 Hazards identification

- **Hazard designation:**



C Corrosive

- **Information pertaining to particular dangers for man and environment**
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 35 Causes severe burns.
R 43 May cause sensitisation by skin contact.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3 Composition/information on ingredients

- **Chemical characterization:**
- **Identification number(s):** Not applicable (preparation)
- **EINECS Number:** Not applicable (preparation)
- **Chemical characterization**
- **Description:** Hardener for epoxy resins

- **Dangerous components:**

CAS: 2855-13-2 EINECS: 220-666-8	isophoronediamine C, Xn; R 21/22-34-43-52/53	25-50%
CAS: 39423-51-3	Alkyletheramine C, Xn; R 21/22-34	25-50%
CAS: 6864-37-5 EINECS: 229-962-1	3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane T, C, N; R 22-23/24-35-51/53	< 25%

- **Additional information**
For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **General information**
Instantly remove any clothing soiled by the product.

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Take affected persons out of danger area and instruct to lie down.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact**

Instantly wash with water and soap and rinse thoroughly.

Cover wound with a sterile dressing.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

- **After eye contact**

Flush open eye under running water continuously for at least 15 minutes.

Seek medical treatment.

- **After swallowing**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; instantly call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**

CO₂, extinguishing powder or water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

- **Special hazards caused by the material, its products of combustion or resulting gases:**

Can be released in case of fire

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Ammonia

- **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

- **Additional information**

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Put on breathing apparatus.

- **Measures for environmental protection:**

Do not allow product to reach sewage system or water bodies.

Do not allow to enter the ground/soil.

- **Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Open and handle container with care.

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- **Information about protection against explosions and fires:**
No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:**
Prevent any penetration into the ground.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:**
No further data; see item 7.
- **Personal protective equipment**
- **General protective and hygienic measures**
Take off immediately all contaminated clothing
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:** Plastic gloves (EN 374)
- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed safety glasses (EN 166).
- **Body protection:** Protective work clothing (EN 340).

9 Physical and chemical properties:

- **General Information**

Form:	Fluid
Colour:	Yellowish
Odour:	Amine-like
- **Change in condition**

Boiling point/Boiling range:	> 245°C
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- **Flash point:** > 100°C (ISO 2719)
- **Density at 20°C** 0.92 - 0.98 g/cm³
- **Solubility in / Miscibility with**

Water:	Miscible
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Dangerous reactions** Strong exothermic reaction with acids
- **Dangerous products of decomposition:**
Poisonous gases/vapours

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Corrosive gases/vapours

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11 Toxicological information• **Acute toxicity:**• **LD/LC50 values that are relevant for classification:****2855-13-2 isophoronediamine**

Oral	LD50	1030 mg/kg (rat)
Dermal	LD50	1840 mg/kg (rabbit)

39423-51-3 Alkyletheramine

Oral	LD50	220 mg/kg (rat)
Dermal	LD50	562 mg/kg (rabbit)

6864-37-5 3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane

Oral	LD50	320 - 460 mg/kg (rat)
Dermal	LD50	200 - 400 mg/kg (rabbit)
Inhalative	LC50/4 h	0.42 mg/l (rat)

• **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** Sensitization possible by skin contact.

12 Ecological information:• **General notes:**

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

13 Disposal considerations• **Product:**• **Recommendation**

Remove according to local authority recommendations, e.g. convey to a suitable incinerator.

• **European waste catalogue**

The waste code classification is to be carried out according to the European Waste Catalogue (EWC) specifically for each branch of industry and each type of process.

• **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information• **Land transport ADR/RID (cross-border)**

- **ADR/RID Class:** 8 Corrosive substances.
- **Hazard Index Number:** 88
- **Substance Index Number:** 2735
- **Packaging group:** I
- **Label:** 8
- **Designation of goods:** 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane, Alkyletheramine)

• **Maritime transport IMDG:**

- **IMDG Class:** 8

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- UN Number: 2735
- Label 8
- Packaging group: I
- EMS Number: F-A,S-B
- Marine pollutant: -
- Correct technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane, Alkyletheramine)
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 8
- UN/ID Number: 2735
- Label 8
- Packaging group: I
- Correct technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane, Alkyletheramine)

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**
C Corrosive
- **Hazard-determining components of labelling:**
isophoronediamine
Alkyletheramine
3,3'-Dimethyl-4,4'-diamino-dicyclohexylmethane
- **Risk phrases:**
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
35 Causes severe burns.
43 May cause sensitisation by skin contact.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.
61 Avoid release to the environment. Refer to special instructions/ safety data sheets.
- **National regulations**
- **Other regulations, limitations and prohibitive regulations**
Document of PlasticsEurope (ERC): "Epoxy resins and curing agents (Toxicology, Health, Safety and Environmental Aspects)"

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**
These R-phrases refer to section 3: "Dangerous Components"
21/22 Harmful in contact with skin and if swallowed.
22 Harmful if swallowed.

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23/24 Toxic by inhalation and in contact with skin.

34 Causes burns.

35 Causes severe burns.

43 May cause sensitisation by skin contact.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Department issuing data specification sheet:** see below
- **Contact:** Research and Development

**49/711/3898000

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