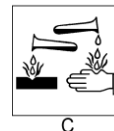


# Safety Data Sheet

## Epamine PC 19



Safety Data Sheet dated 15/3/2004, version 3

Trade name: Epamine PC 19  
Trade code: PF00098  
Product type and use: Hardener for epoxy resins based on alicyclic amines  
Company:  
PO.INT.ER SRL  
Via Alta 28, 10046 POIRINO (To)  
ITALY  
t.le. +39 011 9451606 fax +39 011 9451606  
Emergency telephone number of the company and/or of an authorised advisory centre:  
PO.INT.ER. SRL tel.+39 011 9451606

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components within the meaning of EEC directive 67/548 and corresponding classification:

< 50 % benzyl alcohol

N.67/548/CEE: 603-057-00-5 CAS: 100-51-6 EINECS: 202-859-9  
Xn R20/22

< 25 % 1,3-Bis(aminometil)benzene (MXDA)

CAS: 1477-55-0 EINECS: 216-032-5  
C R20/22 R34 R52/53

< 25 % 3-aminomethyl-3,5,5-trimethylcyclohexylamine

N.67/548/CEE: 612-067-00-9 CAS: 2855-13-2 EINECS: 220-666-8  
C R21/22 R34 R43 R52/53

## 3. HAZARDS IDENTIFICATION

The product is harmful following acute exposure to it and poses a serious health threat if inhaled or ingested.

The product is corrosive and, if brought into contact with the skin, causes burning, with the destruction of the entire thickness of skin tissue.

If brought into contact with the skin, the product may cause sensitisation of the skin.

This product is a threat to the environment; it is harmful to aquatic organisms following acute exposure.

In the long term this product may have negative effects on the aquatic environment, because it is not easily biodegradable and/or is bioaccumulable.

## 4. FIRST AID MEASURES

Contact with skin:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Contact with eyes:

Wash immediately and thoroughly with running water, keeping eyelids raised, for at least 10 minutes. Following this, protect the eyes with sterile gauze or a clean, dry, handkerchief.

OBTAIN A MEDICAL EXAMINATION.

Do not use eyewash or ointment of any kind (before obtaining an examination or advice from an eye specialist).

# Safety Data Sheet

## Epamine PC 19

### Swallowing:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

Give 1 pint of milk or water to drink. Give repeated drinks of water (one capful) every 10 minutes.

### Inhalation:

Ventilate the premises. The patient is to be removed immediately from the contaminated premises to rest in a well ventilated area. OBTAIN MEDICAL ATTENTION.

---

## 5. FIRE-FIGHTING MEASURES

### Recommended extinguishers:

Water, CO<sub>2</sub>, Foam, Chemical powders, according to the materials involved in the fire.

### Extinguishers not to be used:

None in particular.

### Risks arising from combustion:

Avoid inhaling the fumes.

### Protective equipment:

Use protection for the respiratory tract.

---

## 6. ACCIDENTAL RELEASE MEASURES

### Measures for personal safety:

Use a mask, gloves and protective clothing.

### Environmental measures:

Limit leakages with earth or sand.

If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

### Cleaning methods:

Rapidly recover the product. To do so, wear a mask and protective clothing.

If the product is in a liquid form, stop it from entering the drainage system.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

---

## 7. HANDLING AND STORAGE

### Handling precautions:

Avoid contact and inhalation of the vapours. See, too, paragraph 8 below.

Do not eat or drink while working.

### Incompatible materials:

None in particular.

### Storage conditions:

Always keep the containers tightly closed.

### Instructions as regards storage premises:

Adequately ventilated premises.

---

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

### Respiratory protection:

Use adequate protective respiratory equipment, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).

### Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

### Eye protection:

Use close fitting safety goggles and/or visor conforming to BS 2092 GRADE 1).

# Safety Data Sheet

## Epamine PC 19

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Exposure limit(s) (ACGIH):

None.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:	clear liquid, colourless
Odour:	characteristic
Boiling point:	>190°C
Flash point:	>90 °C
Solubility in water:	insoluble
Lipid solubility:	alcohols, glycolether, aromatic hydrocarbons

---

### 10. STABILITY AND REACTIVITY

Conditions to avoid:

Stable under normal conditions.

Substances to avoid:

None in particular.

Hazardous decomposition products:

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, halogenated organic substances, organic peroxides and hydroperoxides, and powerful oxidising agents.

It may catch fire on contact with powerful oxidising agents.

---

### 11. TOXICOLOGICAL INFORMATION

The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.

Set out below is the toxicological information relating to the main substances in the preparation.

benzyl alcohol

LD50 (RABBIT) SKIN SINGLE DOSE: 2000 MG/KG

1,3-Bis(aminometil)benzene (MXDA)

LD(50) oral/rat: 1040 mg/kg

LD(50) inhalation rat: 2.6 mg/4H

Inhalation: harmful for inhalation

Skin contact: the product causes corrosion on skin and mucous membranes

Mutagenicity test: negative

---

### 12. ECOLOGICAL INFORMATION

Adopt good working practices, so that the product is not released into the environment.

List of substances dangerous for the environment and corresponding classification:

< 25% 1,3-Bis(aminometil)benzene (MXDA)

CAS: 1477-55-0 EINECS: 216-032-5

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

LC(50) trota arcobaleno/96h: >100 mg/l

EC(50) daphnia /48h : 16 mg/l

EBC(50) alghe/72h: 12 mg/l

# Safety Data Sheet

## Epamine PC 19

Non scaricare il prodotto nell'ambiente, smaltire attraverso impianto autorizzato a norma di legge.

< 25% 3-aminomethyl-3,5,5-trimethylcyclohexylamine  
N.67/548/CEE: 612-067-00-9 CAS: 2855-13-2 EINECS: 220-666-8  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

---

### 13. DISPOSAL CONSIDERATIONS

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

---

### 14. TRANSPORT INFORMATION

ADR-UN number:	1760 CORROSIVE LIQUID, N.O.S.
ADR-Class:	8-II
ADR-Upper number:	80
ADR-Packing Group:	II
IATA-Un number:	1760
IATA-Class:	8
IATA-Technical name:	UN 1760, liquido corrosivo, n.a.s. (1,3-Bis(aminometil)benzene (MXDA)), 8, II
IATA-Packing group:	II
IMDG-Un number:	1760
IMDG-Class:	8
IMDG-Technical name:	UN 1760, liquido corrosivo, n.a.s. (1,3-Bis(aminometil)benzene (MXDA)), 8, II
IMDG-Packing group:	II

---

### 15. REGULATORY INFORMATION

99/45/EC (Classification and Labelling), 2001/60/CE, 67/548/CEE, 2001/59/CE, 91/155/CEE, 2001/58/CE:

Symbols:

C Corrosive

R Phrases:

R34 Causes burns.

R20/22 Harmful by inhalation and if swallowed.

R43 May cause sensitization by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S7 Keep container tightly closed.

Contents:

benzyl alcohol

3-aminomethyl-3,5,5-trimethylcyclohexylamine

1,3-Bis(aminometil)benzene (MXDA)

# Safety Data Sheet

## Epamine PC 19

Where applicable, refer to the following regulatory provisions :  
Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

---

### 16. OTHER INFORMATION

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold  
ACGIH - Treshold Limit Values - 1997 edition

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Phrases R used in paragraph 2:

R20/22 Harmful by inhalation and if swallowed.  
R34 Causes burns.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R21/22 Harmful in contact with skin and if swallowed.  
R43 May cause sensitization by skin contact.

Modified paragraphs:

2. COMPOSITION/INFORMATION ON INGREDIENTS  
3. HAZARDS IDENTIFICATION  
4. FIRST AID MEASURES  
7. HANDLING AND STORAGE  
9. PHYSICAL AND CHEMICAL PROPERTIES  
10. STABILITY AND REACTIVITY  
11. TOXICOLOGICAL INFORMATION  
12. ECOLOGICAL INFORMATION  
14. TRANSPORT INFORMATION  
15. REGULATORY INFORMATION  
16. OTHER INFORMATION