## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

## **EPROPOX HC 2640 A**

Version 8.0 [2.0 SDB GB] Revision Date 28.10.2014 Print Date 03.11.2014

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : EPROPOX HC 2640 A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Casting Resin

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company Trelleborg Pipe Seals Duisburg GmbH

Dr.-Alfred-Herrhausen-Allee 36

47228 Duisburg

Germany

Telephone +49 (0) 2065 999-0 Telefax +49 (0) 2065 999-111

E-mail address technic.epros@trelleborg.com

**1.4 Emergency telephone number** +49 (0) 2065 999-150

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Sensitising R43: May cause sensitisation by skin contact.

Irritant R36/38: Irritating to eyes and skin.

Dangerous for the environment R51/53: Toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environ-

ment.

## 2.2 Label elements

## Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms





Signal word : Warning

Hazard statements : H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ va-

pours/spray.

P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

P280 Wear protective gloves.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Hazardous components which must be listed on the label:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)

Epichlorohydrin-formaldehyde-phenol polymer number average molecular weight # 700

1,4-bis (2,3-epoxypropoxy)butane

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## **SECTION 3: Composition/information on ingredients**

## 3.2 Mixtures

Chemical nature : Modified epoxy resin

## Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
reaction product:	25068-38-6	Xi; R36/38	Eye Irrit. 2; H319	>= 50 - <= 100
bisphenol-A-		R43	Skin Irrit. 2; H315	
(epichlorhydrin) and	01-	N; R51-R53	Skin Sens. 1; H317	
epoxy resin (number	2119456619-26		Aquatic Chronic 2;	

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average molecular weight <= 700)			H411	
Epichlorohydrin- formaldehyde-phenol polymer number aver- age molecular weight # 700	9003-36-5	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 20 - < 25
1,4-bis (2,3- epoxypropoxy)butane	2425-79-8 219-371-7 01- 2119494060-45	Xn; R20/21 Xi; R36/38 R43	Acute Tox. 4; H332 Acute Tox. 4; H312 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1; H317	>= 10 - < 12,5

For explanation of abbreviations see section 16.

### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : Keep warm and in a quiet place.

Show this safety data sheet to the doctor in attendance.

Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.

Keep patient warm and at rest.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Wash off immediately with soap and plenty of water.

Do NOT use solvents or thinners. If on clothes, remove clothes.

If skin irritation persists, call a physician.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 15 minutes.

If eye irritation persists, consult a specialist. If easy to do, remove contact lens, if wom.

If swallowed : Keep at rest.

Do not induce vomiting without medical advice.

Keep respiratory tract clear.

If symptoms persist, call a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : irritant effects

Redness

sensitising effects

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### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media : Foam

Sand

Carbon dioxide (CO2)

Water mist

Unsuitable extinguishing

media

: Water spray jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

The pressure in sealed containers can increase under the

influence of heat.

Cool closed containers exposed to fire with water spray.

### 5.3 Advice for firefighters

Special protective equipment

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Further information : In the event of fire and/or explosion do not breathe fumes.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Immediately evacuate personnel to safe areas.

Prevent fire extinguishing water from contaminating surface

water or the ground water system.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

Evacuate personnel to safe areas. Use personal protective equipment.

Ensure adequate ventilation.

Inform the responsible authorities in case of gas leakage, or of

entry into waterways, soil or drains.

## 6.2 Environmental precautions

Environmental precautions : Do not allow uncontrolled discharge of product into the envi-

ronment.

Try to prevent the material from entering drains or water

courses.

Local authorities should be advised if significant spillages

cannot be contained.

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### 6.3 Methods and material for containment and cleaning up

Methods for deaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

Pick up and transfer to properly labelled containers.

#### 6.4 Reference to other sections

For personal protection see section 8.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.

Avoid inhalation, ingestion and contact with skin and eyes.

Wear personal protective equipment.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is

being used.

Advice on protection against

fire and explosion

Keep away from open flames, hot surfaces and sources of

ignition.

Hygiene measures : Provide adequate ventilation. Wash hands and face before

breaks and immediately after handling the product.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

,0

: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Advice on common storage

: Keep away from oxidising agents, strongly acid or alkaline

materials and amines.

Keep product and empty container away from heat and

sources of ignition.

Keep away from food and drink.

Other data : Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this sub-

stance/mixture.



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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

: End Use: Workers

reaction product: bisphenol-A-(epichlorhydrin) and epoxy

Exposure routes: Skin contact

resin (number average molecular weight <= 700) Potential health effects: Acute systemic effects, Long-term sys-

temic effects Value: 8,33 mg/kg End Use: Workers

Exposure routes: Inhalation

Potential health effects: Acute systemic effects, Long-term local

effects

Value: 12,25 mg/m3 End Use: Consumers

Exposure routes: Skin contact

Potential health effects: Acute systemic effects, Long-term sys-

temic effects
Value: 3,571 mg/kg
End Use: Consumers
Exposure routes: Ingestion

Potential health effects: Acute systemic effects, Long-term sys-

temic effects Value: 0,75 mg/kg

## Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700) : Fresh water

Value: 0,006 mg/l

Marine water Value: 0,0006 mg/l Intermittent releases Value: 0,018 mg/l Sewage treatment plant

Value: 10 mg/l Fresh water sediment Value: 0,996 mg/kg Marine sediment Value: 0,0996 mg/kg

Soil

Value: 0,196 mg/kg

### 8.2 Exposure controls

## Engineering measures

Effective exhaust ventilation system effective ventilation in all processing areas

### Personal protective equipment

Eye protection : Do not wear contact lenses.

Safety glasses with side-shields conforming to EN166

Ensure that eyewash stations and safety showers are dose to

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the workstation location.

Hand protection

Material : Chemical resistant gloves made of butyl rubber or nitrile rub-

ber category III according to EN 374.

Skin and body protection : Protective suit

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-

tilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. In the case of vapour formation use a respirator with an ap-

proved filter.

Respirator with a vapour filter (EN 141)

Apply technical measures to comply with the occupational

exposure limits.

This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.

Protective measures : Avoid contact with skin.

Wear suitable protective equipment.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : milky

Odour : slight

Odour Threshold : not determined

pH : not determined

Melting point/freezing point : Not applicable

Boiling point/boiling range : > 200 °C

Flash point : 150 °C

Evaporation rate : not determined

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : Not applicable

Relative vapour density : not determined

Density : 1,17 g/cm3 (25 °C)

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Bulk density : not determined

Solubility(ies)

Solubility in other solvents : not determined

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : Not applicable

Thermal decomposition : Method: No data available

Viscosity

Viscosity, dynamic : 2.000 - 3.500 mPa.s (25 °C)

Viscosity, kinematic : not determined

Explosive properties : Not applicable

Oxidizing properties : Not applicable

9.2 Other information

Surface tension : not determined

Sublimation point : Not applicable

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

Stable under recommended storage conditions.

## 10.2 Chemical stability

No decomposition if stored and applied as directed.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:

Bases

Strong oxidizing agents

Avoid amines.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : Incompatible with oxidizing agents.

## 10.6 Hazardous decomposition products

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Hazardous decomposition

products

: This product may release the following:

Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

## **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

### Acute toxicity

**Product:** 

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Acute toxicity estimate : > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute demal toxicity : Acute toxicity estimate : > 2.000 mg/kg

Method: Calculation method

### **Components:**

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

Acute oral toxicity : LD50 (Rat, female): > 2.000 mg/kg

Method: OECD Test Guideline 420

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

#### Skin corrosion/irritation

### Product:

Remarks: No data available

## Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700): Species: Rabbit Exposure time: 4 h

Method: OECD Test Guideline 404

Result: Skin irritation

GLP: yes

## Serious eye damage/eye irritation

## **Product:**

Remarks: No data available

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### Respiratory or skin sensitisation

**Product:** 

Remarks: No data available

Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

Test Type: Mouse Local Lymph Node assay (LLNA)

Species: Mouse

Method: OECD Test Guideline 429

Result: May cause sensitisation by skin contact.

GLP: yes

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT - single exposure

**Product:** 

Remarks: Not applicable

STOT - repeated exposure

Repeated dose toxicity

**Product:** 

Remarks: No data available

**Aspiration toxicity** 

Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

No aspiration toxicity classification

**Further information** 

**Product:** 

Remarks: No data available

## **SECTION 12: Ecological information**

## 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: No data available

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Toxicity to daphnia and other

aquatic invertebrates

: Remarks: No data available

#### Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 1,7 mg/l

aquatic invertebrates

Exposure time: 48 h

Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC: 0,3 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

## 12.2 Persistence and degradability

#### **Product:**

Biodegradability : Remarks: No data available

#### Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

Biodegradability : Result: Not readily biodegradable.

Method: OECD Test Guideline 301F

GLP: yes

## 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data available

### 12.4 Mobility in soil

No data available

## 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

### 12.6 Other adverse effects

**Product:** 

Additional ecological informa-

tion

: Remarks: An environmental hazard cannot be excluded in the

event of unprofessional handling or disposal.

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## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Product : In accordance with local and national regulations.

Container hazardous when empty.

Do not dispose of with domestic refuse.

Do not mix waste streams during collection.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

## **SECTION 14: Transport information**

14.1 UN number

 ADR/RID
 : UN 3082

 IMDG
 : UN 3082

 IATA
 : UN 3082

14.2 UN proper shipping name

ADR/RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Epoxy resin)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Epoxy resin)

IATA : Environmentally hazardous substance, liquid, n.o.s.

(Epoxy resin)

14.3 Transport hazard class(es)

 ADR/RID
 : 9

 IMDG
 : 9

 IATA
 : 9

14.4 Packing group

ADR/RID

Packing group : III

Classification Code : M6

Hazard Identification Number : 90

Labels : 9

Tunnel restriction code : E

**IMDG** 

Packing group : III
Labels : 9
EmS Code : F-A, S-F

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**IATA** 

Packing instruction (cargo : 964

aircraft)

Packing instruction (passen-: 964

ger aircraft)

Packing group : 111 Labels : 9

14.5 Environmental hazards

ADR/RID

Environmentally hazardous : yes

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Restrictions on the manufacture, placing on

the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH),

Article 57).

REACH - List of substances subject to authorisation

(Annex XIV)

9b

: Not applicable

: Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-

accident hazards involving dangerous substances

Dangerous for the envi-

Quantity 1 200 t

Quantity 2 500 t

ronment

## 15.2 Chemical Safety Assessment

Not applicable

## **SECTION 16: Other information**

#### Full text of R-Phrases

R20/21 Harmful by inhalation and in contact with skin.

Irritating to eyes and skin. R36/38

May cause sensitisation by skin contact. R43

: Toxic to aquatic organisms. R51

R51/53 : Toxic to aquatic organisms, may cause long-term adverse



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effects in the aquatic environment.

R53 : May cause long-term adverse effects in the aquatic environ-

ment.

Full text of H-Statements

H312 : Hamful in contact with skin.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Chronic aquatic toxicity

Eye Irrit. : Eye irritation
Skin Irrit. : Skin irritation
Skin Sens. : Skin sensitisation

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.