

Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

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

#### 1.1 Product identifier

Trade name: Epotec® YD 580 SP

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

No further relevant information available.

Application of the substance / the mixture Resin for coating, composite, civil, electrical, adhesive systems

#### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Aditya Birla Chemicals (Thailand) Limited.

(00004 Advanced Materials), 2, Map Ta Phut Industrial Estate,

I-5 Road, Map Ta Phut Subdistrict, Mueang Rayong District,

Rayong Province, 21150, Thailand.

GRASIM Industries Limited.

Epoxy Division, Plot No. 1,

GIDC Vilayat Industrial Estate,

P. O. Vilayat – 392 012, Taluka: Vagra,

District: Bharuch Gujarat, India

#### Further information obtainable from:

sds-abg.am@adityabirla.com

www.abg-am.com

#### 1.4 Emergency telephone number:

During normal opening times (9AM to 6PM): Thailand +66-38-685233 - 4 / India +91-8154007564 or +91-8154007565

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 1B H360F May damage fertility.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms







**GHS07 GHS08 GHS09** 

#### Signal word Danger

### Hazard-determining components of labelling:

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

(Contd. on page 2)



## Safety Data Sheet

## according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 1)

#### **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.

### **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

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

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

## Additional information:

Restricted to professional users.

#### 2.3 Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment Not applicable.

**PBT:** Not applicable. **vPvB:** Not applicable.

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

#### 3.2 Mixtures

**Description:** Mixture: consisting of the following components.

Components:		
CAS: 1675-54-3 EINECS: 216-823-5 Reg.nr.: Thailand:01-2119456619- 26-0016 India: 01-2119456619-26- 0036	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane Alternative CAS number: 25068-38-6  Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	50-70%
EC number: 701-263-0 Reg.nr.: Thailand:01-2119454392- 40-0005	Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane  Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	10-30%

(Contd. on page 3)



Version number 2 (replaces version 1) Printing date 21.06.2024 Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

CAS: 68609-97-2 EINECS: 271-846-8

Reg.nr.: Thailand:01-2119485289-

22-0006

India:01-2119485289-22-

0011

(Contd. of page 2) oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 5-10% Repr. 1B, H360F; Skin Irrit. 2, H315; Skin Sens. 1, H317

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

#### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product.

#### After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

#### After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Drink plenty of water and provide fresh air. Call for a doctor immediately.

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

No further relevant information available.

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

No further relevant information available.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents: Water with full jet

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

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO)

#### 5.3 Advice for firefighters

**Protective equipment:** Wear self-contained respiratory protective device.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

#### **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

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

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

(Contd. on page 4)



Version number 2 (replaces version 1) Printing date 21.06.2024 Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 3)

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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

#### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

Storage:

#### Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles.

Store in a cool location.

#### Information about storage in one common storage facility:

Do not store together with oxidising and acidic materials as well as heavy-metal compounds.

#### Further information about storage conditions:

Keep container tightly sealed.

Store receptacle in a well ventilated area.

7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

momitorea	at the t	workplace.
DNELs		
1675-54-3	2,2'-[(1	1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
Dermal	DNEL	8.33 mg/kg/day (worker)
Inhalative	DNEL	12.25 mg/m³ (worker)
	ebis(4	of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'- ,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl] )oxirane
Dermal	DNEL	104.15 mg/kg/day (worker)
Inhalative	DNEL	29.39 mg/m³ (worker)
DNEC		

#### **PNECs**

#### 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

PNEC	0.006	mg/l	(Fres	hwat	er)
	0.000	6 ma	/I (sea	wate	er)

(Contd. on page 5)



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 4)

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl] phenoxy}methyl)oxirane

PNEC 0.003 mg/l (Freshwater)

0.0003 mg/l (seawater)

**Additional information:** The lists valid during the making were used as basis.

#### 8.2 Exposure controls

**Appropriate engineering controls** No further data; see section 7.

Individual protection measures, such as personal protective equipment

#### General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

#### **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Use suitable respiratory protective device in case of insufficient ventilation.

#### Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### 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/face protection

Safety glasses



Tightly sealed goggles

#### **Body protection:**

**Boots** 

Protective work clothing

- EU



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 5)

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

9.1 Information on basic physical and chemical properties

**General Information** 

Physical stateLiquidColour:ColourlessOdour:Light

Odour threshold:Not determined.Melting point/freezing point:Undetermined.

Boiling point or initial boiling point and boiling

range >200 °C Not applicable.

Lower and upper explosion limit

Lower:Not determined.Upper:Not determined.

Flash point: >150 °C
Auto-ignition temperature: Not applicable.

Decomposition temperature: Not determined.

pH Not determined.

Not determined.

Viscosity:

**Kinematic viscosity Dynamic:**Not determined.
Not determined.

Solubility

water: Insoluble.

**Partition coefficient n-octanol/water (log value)** Not determined. **Vapour pressure:** <0.08 hPa

Density and/or relative density

Density at 25 °C:1.1 - 1.2 g/cm³Relative densityNot determined.Vapour densityNot determined.

9.2 Other information

Appearance:

Form: Liquid

Ignition temperature: Product is not selfigniting.

**Explosive properties:** Product does not present an explosion hazard.

 VOC (EC)
 0.0 g/l

 Solids content:
 0.0 %

**Evaporation rate** Not determined.

Information with regard to physical hazard

classes **Explosives** Void (Not classified) Flammable gases Void (Not classified) **Aerosols** Void (Not classified) Oxidising gases Void (Not classified) Gases under pressure Void (Not classified) Flammable liquids Void (Not classified) Void (Not classified) Flammable solids Self-reactive substances and mixtures Void (Not classified) **Pyrophoric liquids** Void (Not classified)

(Contd. on page 7)



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 6)

Pyrophoric solids Void (Not classified)
Self-heating substances and mixtures Void (Not classified)

Substances and mixtures, which emit flammable

gases in contact with water

Oxidising liquids

Oxidising solids

Organic peroxides

Corrosive to metals

Desensitised explosives

Void (Not classified)

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

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

Stable at environment temperature.

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions Reacts with alcohols, amines, aqueous acids and alkalis.

**10.4 Conditions to avoid** No further relevant information available.

10.5 Incompatible materials:

Acids, bases, amines and oxidizing agent.

No further relevant information available.

10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

#### **SECTION 11: Toxicological information**

### 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Oral LD50 >15,000 mg/kg (rat)
Dermal LD50 23,000 mg/kg (rabbit)

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-

[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl] phenoxy}methyl)oxirane

Oral LD50 >2,000 mg/kg (rat)
Dermal LD50 >2,000 mg/kg (rabbit)

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification: Acute dermal toxicity: To be identified as applicable

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity May damage fertility.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

(Contd. on page 8)



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 7)

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

None of the ingredients is listed.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

## Aquatic toxicity:

#### 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

EC50 11 mg/l (algae)

100 mg/l (bacterium) 1.8 mg/l (Daphnia)

LC50 2 mg/l (Fish)

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]
phenoxy}methyl)oxirane

EC50 1.8 mg/l (algae)

2.55 mg/l (Daphnia)

LC50 2.54 mg/l (Leuciscus idus)

### 12.2 Persistence and degradability Not easily biodegradable

**12.3 Bioaccumulative potential** No further relevant information available.

**12.4 Mobility in soil** No further relevant information available.

#### 12.5 Results of PBT and vPvB assessment

A detailed analysis of the Persistence, Bioaccumulation and Toxicity has been brought together into a clear conclusion on whether BPFDGE is not a PBT/vPvB substance. BPFDGE is not readily biodegradable under the conditions of the study and likely meets the P Criteria.. Applicable QSAR results show that BPFDGE is not B. The toxicity studies value is greater than the 0.01 mg/L and does not meet the T criteria. The data show that the properties of the substance do not meet the specific criteria detailed in Annex XIII and, consequently, that the substance is not considered a PBT/vPvB.

**PBT:** Not applicable. **vPvB:** Not applicable.

#### 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

#### 12.7 Other adverse effects

Remark: Toxic for fish

#### Additional ecological information:

#### **General notes:**

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

EU



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 8)

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Europ	European waste catalogue	
HP4	Irritant - skin irritation and eye damage	
HP10	Toxic for reproduction	
HP13	Sensitising	
HP14	Ecotoxic	

#### **Uncleaned packaging:**

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

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN number or ID number	
ADR/RID/ADN, IMDG, IATA	UN3082
14.2 UN proper shipping name	
ADR/RID/ADN	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin MG<700 Bisphenol F-Epichlorohydrin resin)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin MG<700, Bisphenol F-
IATA	Epichlorohydrin resin), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin MG<700, Bisphenol F- Epichlorohydrin resin)
14.3 Transport hazard class(es) ADR/RID/ADN, IMDG, IATA	
. ,	
. ,	9 Miscellaneous dangerous substances and articles. 9
ADR/RID/ADN, IMDG, IATA  Class Label  14.4 Packing group	<u> </u>
ADR/RID/ADN, IMDG, IATA  Class Label	9
ADR/RID/ADN, IMDG, IATA  Class Label  14.4 Packing group ADR/RID/ADN, IMDG, IATA	<del>`</del>
ADR/RID/ADN, IMDG, IATA  Class Label  14.4 Packing group ADR/RID/ADN, IMDG, IATA  14.5 Environmental hazards:	9 III Yes



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

	(Contd. of pag
Stowage Category	A
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
HazChem Code	•3Z
ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category Tunnel restriction code	3 (-)
IMDG Limited quantities (LQ) Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXY RESIN MG<700, BISPHENOL F-EPICHLOROHYDRIN RESIN), 9, III

## **SECTION 15: Regulatory information**

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

**Seveso category** E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

**REGULATION (EU) 2019/1148** 

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

**Annex II - REPORTABLE EXPLOSIVES PRECURSORS** 

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

(Contd. on page 11)



Printing date 21.06.2024 Version number 2 (replaces version 1) Revision date: 23.05.2024

Trade name: Epotec® YD 580 SP

(Contd. of page 10)

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

#### Reasons for alterations

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.

Date of previous version: 11.01.2024 Version number of previous version: 1

#### Abbreviations and acronyms:

RID: Reglement internationale concernent le transport des merchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

P: Marine Pollutant

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Repr. 1B: Reproductive toxicity - Category 1B

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

EU