

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017





Version number 1

Revision date: 08.09.2017

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 composite applications.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)
No.2, I-5 Road, Maptaphut Industrial Estate, Maptaphut,
Muang, Rayong 21150
THAILAND
- **Further information obtainable from:**
epoxymktg@adityabirla.com
www.adityabirlachemicals.com
www.epotec.info
- **1.4 Emergency telephone number:**
During normal opening times: +66-38-685233
Fax (Factory): +66-38-683982

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
-  GHS09 environment
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
-  GHS07
 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.
- **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 GHS09
- **Signal word** Warning
- **Hazard-determining components of labelling:**
Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight \leq 700)
Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin
Glycidyl ether C12-C14 alcohols
- **Hazard statements**
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 1)

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / eye protection / face 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.
- P321 Specific treatment (see on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P391 Collect spillage.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains epoxy constituents. May produce an allergic reaction.

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.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: Mixture: consisting of the following components.

Components:

CAS: 25068-38-6 NLP: 500-033-5 Reg.nr.: Thailand:01-2119456619-26-0016 India: 01-2119456619-26-0036	Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700) ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-70%
CAS: 28064-14-4 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-0005	Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	10-30%
CAS: 68609-97-2 EINECS: 271-846-8 Reg.nr.: 01-2119485289-22-0006	Glycidyl ether C12-C14 alcohols ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	5-15%

SECTION 4: First aid measures

4.1 Description of first aid measures
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.

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

After eye contact:

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

(Contd. on page 3)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 2)

- **After swallowing:**
Drink plenty of water and provide fresh air. Call for a doctor immediately.
If symptoms persist consult doctor.
- **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.
- **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:**
Inform respective authorities in case of seepage into water course or sewage system.
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).
Dispose of the material collected according to regulations.
- **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.
- **Information about fire - and explosion protection:** Protect from heat.
- **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.

EU

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 3)

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **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 protection:**
Safety glasses



Tightly sealed goggles

- **Body protection:**
Boots
Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Light

· Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	> 200 °C

Flash point:	> 150 °C
--------------	----------

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

Vapour pressure:	< 0.08 hPa
------------------	------------

Density at 25 °C:	1.10-1.20 g/cm ³
-------------------	-----------------------------

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 4)

- **Solubility in / Miscibility with water:** Insoluble.
- **9.2 Other information** No further relevant information available.

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.
- **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.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

25068-38-6 Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700)

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)

28064-14-4 Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin

Oral	LD50	> 2000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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** Based on available data, the classification criteria are not met.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

25068-38-6 Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700)

EC50	1.8 mg/kg (daphnia)
------	---------------------

- **12.2 Persistence and degradability** Not easily biodegradable

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 5)

- **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** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

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

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR/RID/ADN, IMDG, IATA 	<p style="text-align: right;">3082</p>
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · IMDG, IATA 	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight \leq 700), Reaction product: Bisphenol-F-(epichlorohydrin); epoxy resin)
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR/RID/ADN, IMDG, IATA · Class · Label 	<p style="text-align: right;">9 Miscellaneous dangerous substances and articles. 9</p>
<ul style="list-style-type: none"> · 14.4 Packing group · ADR/RID/ADN, IMDG, IATA 	<p style="text-align: right;">III</p>
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	<p style="text-align: right;">Yes</p>
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: 	<p style="text-align: right;">Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F</p>
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR/RID/ADN · Limited quantities (LQ) · Transport category · Tunnel restriction code 	<p style="text-align: right;">LQ7 3 E</p>

EU

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 6)

SECTION 15: Regulatory information

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

- **Labelling according to Regulation (EC) No 1272/2008**

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

- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning

- **Hazard-determining components of labelling:**

Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight \leq 700)

Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin

Glycidyl ether C12-C14 alcohols

- **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

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 label before use.

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.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face 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.

P321 Specific treatment (see on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

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

- **Directive 2012/18/EU**

- **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

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

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The msds has been generated using the DR-Software product ChemGes.

(Contd. on page 8)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 08.09.2017

Version number 1

Revision date: 08.09.2017

Trade name: EPOTEC YD 580 SP

(Contd. of page 7)

· Abbreviations and acronyms:

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

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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)

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

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

EU