

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/15/2018



Reviewed on 03/15/2018

1 Identification

- **Product identifier**
- **Trade name:** EPOTEC YD 128
- **CAS Number:**
25068-38-6
- **NLP Number:**
500-033-5
- **Application of the substance / the mixture**
Resin for coating, composite, civil, electrical, adhesive systems
- **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
GRASIM INDUSTRIES LTD. (EPOXY DIVISION), Plot No. 1, GIDC, Vilayat Industrial Estate, Tehsil Vagra,
Dist. Bharuch - 392012, Gujarat, INDIA
- **Information department:**

epoxymktg@adityabirla.com
www.adityabirlachemicals.com
www.epotec.info
- **Emergency telephone number:**
During normal opening times: Thailand +66-38-685233
India +918154007544

2 Hazard(s) identification

- **Classification of the substance or mixture**
-  GHS09 Environment
 Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
-  GHS07
 Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2A H319 Causes serious eye irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



- **Signal word** Warning

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- **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**

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 Wash thoroughly after handling.
 P272 Contaminated work clothing must 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.
 P363 Wash contaminated clothing before reuse.
 P391 Collect spillage.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

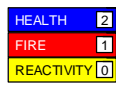
- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2
 Fire = 1
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH 2 Health = 2
 FIRE 1 Fire = 1
 REACTIVITY 0 Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment** Not applicable.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

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

- **Identification number(s) EC No. -**

- **NLP Number:** 500-033-5

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4 First-aid measures

- **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 eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **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.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

90 mg/m³

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· **PAC-2:**

990 mg/m³

· **PAC-3:**

5,900 mg/m³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store receptacle in a well ventilated area.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **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.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
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.

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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.

- **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:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Liquid
Color:	Light yellow
Odor:	Light

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>260 °C (>500 °F)

- **Flash point:** 252 °C (485.6 °F)

- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapor pressure at 20 °C (68 °F):** 0.04 hPa (0 mm Hg)

- **Density at 20 °C (68 °F):** 1.16 g/cm³ (9.6802 lbs/gal)

- **Solubility in / Miscibility with**

Water:	Insoluble.
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- **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

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

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

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- **Incompatible materials:** Acids, bases, amines and oxidizing agent.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

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

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

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

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

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

EC50	1.8 mg/kg (daphnia)
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- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**

Water hazard class 2 (Assessment by list): 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.
 Also poisonous for fish and plankton in water bodies.

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- Toxic for aquatic organisms
- **Results of PBT and vPvB assessment** Not applicable.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT	Void
· ADR/RID/ADN, IMDG, IATA	UN3082
· UN proper shipping name	UN3082 Environmentally hazardous substances, liquid, n.o.s. (Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700)) 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700))
· ADR/RID/ADN	
· IMDG	
· IATA	MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight ≤ 700))
· Transport hazard class(es)	
· DOT	
· Class	Void
· Label	Void
· ADR/RID/ADN, IMDG, IATA	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	
· DOT	Void
· ADR/RID/ADN, IMDG, IATA	III

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- **Environmental hazards:**
- **Marine pollutant:** Y
- **Special precautions for user:** Warning: Miscellaneous dangerous substances and articles
- **Danger code (Kemler):** 90
- **EMS Number:** F-A, S-F
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

15 Regulatory information

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

· **Section 313 (Specific toxic chemical listings):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS09

· **Signal word** Warning

· **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**

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 Wash thoroughly after handling.
- P272 Contaminated work clothing must not be allowed out of the workplace.
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- P280 Wear protective gloves / eye protection / face protection.
- P302+P352 If on skin: Wash with plenty of water.
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- P321 Specific treatment (see on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
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- P362+P364 Take off contaminated clothing and wash it before reuse.
- P363 Wash contaminated clothing before reuse.
- P391 Collect spillage.

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- P501 Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. of page 8)
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

- **Contact:** E-mail : epoxymktg@adityabirla.com
- **Date of preparation / last revision** 03/15/2018 / -
- **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)
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMIS: Hazardous Materials Identification System (USA)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
 - Skin Sens. 1: Skin sensitisation – Category 1
 - Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2