# 1 Identification of substance

- **Product details**
  - **Trade name:** EPOTEC YD 128 ED
  - **Application of the substance / the preparation**
    Resin for coating, composite, civil, electrical, adhesive systems
- **Manufacturer/Supplier:**
  Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)
  No.2, I-5 Road, Maptaphut Industrial Estate, Maptaphut,
  Muang, Rayong 21150
  THAILAND
- **Information department:**
  epoxymktg@adityabirla.com
  www.adityabirlachemicals.com
  www.epotec.info
- **Emergency information:**
  During normal opening times: +66-38-685233
  Fax (Factory): +66-38-683982

# 2 Composition/Data on components

- **Chemical characterization:**
  - **CAS No. Description**
    25068-38-6
    Reaction product: bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight \( \leq 700 \))
- **Identification number(s)**
  - **NLP Number:** 500-033-5
  - **Additional information:** 100%

# 3 Hazards identification

- **Hazard description:**
  - Irritant

- **Information pertaining to particular dangers for man and environment:**
  - Irritating to eyes and skin.
  - May cause sensitisation by skin contact.
  - Contains epoxy constituents. See information supplied by the manufacturer.

- **Classification system:**
  - **HMIS-ratings (scale 0 - 4)**
    - **HEALTH** Health = 1
    - **FIRE** Fire = 1
    - **REACTIVITY** Reactivity = 0

- **GHS label elements**
  - **Warning**
    - 3.2/2 - Causes skin irritation.
    - 3.3/2A - Causes serious eye irritation.
    - 3.4/1 - May cause an allergic skin reaction.
    - 4.1/2 - Toxic to aquatic life with long lasting effects.
Trade name: EPOTEC YD 128 ED

4 First aid measures

- **After inhalation:** Supply fresh air and to be sure call for a doctor.
- **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:** Do not induce vomiting; immediately call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents:**
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**
  - Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
  - Prevent seepage into sewage system, workpits and cellars.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Clean the affected area carefully; suitable cleaners are:
    - Warm water
  - Dispose of the collected material according to regulations.

7 Handling and storage

- **Handling:**
  - **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
  - **Information about protection against explosions and fires:** Protect from heat.
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
    - Store in a cool location.
    - Provide ventilation for receptacles.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    - Store receptacle in a well ventilated area.
    - Keep receptacle tightly sealed.
8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.
- 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.
- Personal protective equipment:
  - Breathing equipment: Not necessary if room is well-ventilated.
  - 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.
- 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
- Body protection:
  Use protective suit.
- Boots

9 Physical and chemical properties

- General Information
  - Form: Liquid
  - Color: Light yellow
  - Odor: Mild
- Change in condition
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: > 260 °C (> 500 °F)
- Flash point: 252 °C (486 °F)
- Ignition temperature: Not applicable.
- Danger of explosion: Not applicable.
- Vapor pressure at 77 °C (171 °F): 0.03 hPa
- Density at 20 °C (68 °F): 1.16 g/cm³
- Solubility in / Miscibility with Water: Insoluble.

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used and stored according to specifications.
- Materials to be avoided:
- Dangerous reactions
  Reacts with amines.
Trade name: EPOTEC YD 128 ED

Reacts with acids, alkalis and oxidizing agents.
* **Dangerous products of decomposition**: Carbon monoxide and carbon dioxide

### 11 Toxicological information

**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)

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;5000 mg/kg (rat)</td>
<td>20000 mg/kg (rabbit)</td>
</tr>
</tbody>
</table>

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

### 12 Ecological information

- **Information about elimination (persistence and degradability)**: Not easily biodegradable

### 13 Disposal considerations

- **Product**:
- **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

- **DOT regulations**:
  - **Hazard class**: -
  - **Remarks**: Not regulated.

- **Maritime transport IMDG**:
  - **IMDG Class**: 9
  - **UN Number**: 3082
  - **Label**: 9
  - **Packaging group**: III
  - **EMS Number**: F-A,S-F
  - **Marine pollutant**: Yes
  - **Proper shipping name**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin)

- **Air transport ICAO-TI and IATA-DGR**:
  - **ICAO/IATA Class**: -
  - **Remarks**: Not regulated.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 10/26/2010
Reviewed on 10/26/2010

Trade name: EPOTEC YD 128 ED

(Contd. of page 4)

### 15 Regulations

- **Sara**
  - **Section 313 (Specific toxic chemical listings):**
    Substance is not listed.
  - **TSCA (Toxic Substances Control Act):**
    Substance is listed.

- **Product related hazard informations:**
  - **Hazard symbols:**
    - Irritant

- **Risk phrases:**
  - Irritating to eyes and skin.
  - May cause sensitisation by skin contact.

- **Safety phrases:**
  - Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
  - Avoid contact with skin.
  - Wear suitable gloves and eye/face protection.
  - Use appropriate container to avoid environmental contamination.

- **Special labeling of certain preparations:**
  - Contains epoxy constituents. See information supplied by the manufacturer.

- **National regulations:**
  - **Additional classification according to Decree on Hazardous Materials:** Marine pollutant

### 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.

- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
  - ICAO: International Civil Aviation Organization
  - ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
  - GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - HMIS: Hazardous Materials Identification System (USA)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent