


**Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)**
**EPOTEC YDF 173**
**Description**

Epotec YDF 173 is a higher functionality novolac resin with functionality more than the standard bis-A or bis-F based liquid epoxy resins epotec YD 128 or epotec YDF 170 producing a more tightly cross-linked cured system. This increased cure density of epotec YDF 173 based systems provides improved thermal stability, hardness, mechanical strength and resistance against various chemicals. The improved chemical resistance makes them the product of choice for use especially in linings for storage tanks, pipelines et al.

Epotec YDF 173 is compatible with all common epoxy resins in all ratios. It can also be blended with epoxy reactive diluents to reduce viscosity. A tri-functional epoxy reactive diluent is preferred to maintain the chemical resistance properties and thermal stability.

**Applications**

- Adhesives for electronic application
- Chemical resistance coatings
- Industrial floors
- Composite
- Laminates

**Specification**

| Appearance              | Visual         | Viscous liquid    |
|-------------------------|----------------|-------------------|
| Colour                  | ASTM D 1544-04 | 1 G max.          |
| Epoxy Equivalent Weight | ASTM D 1652-04 | 167 - 175 g/eq    |
| Viscosity* 25 °C        | ASTM D 2196-05 | 7,000 - 11,000 cP |
| Hydrolysable Chlorine   | ASTM D 1726-03 | 0.1 % Max.        |

\*Brookfield viscosity

**Typical properties \***

|                      |                |             |
|----------------------|----------------|-------------|
| Epoxide Value        | ASTM D 1544-04 | 5.71 – 5.99 |
| Density @25°C        | ASTM D 1475-98 | 1.18 g/ml   |
| Water content        | ASTM E 203-01  | 0.1 % max.  |
| ECH content          | TEC-AS-P-023   | 10 ppm max. |
| Non-volatile content | ASTM D 1259-06 | 100 %       |
| Flash point          | ASTM D 93      | > 150 °C    |

## TECHNICAL DATA SHEET

\* = Typical properties are indicated for information only

**Packing** Epotec YDF 173 is packed and delivered in steel drums, 220 kg per drum as a standard pack.  
Other packs are available upon request.

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**Storage** Epotec YDF 173 resin should be stored in original tightly closed container, in dry and warm conditions to avoid crystallization. Under these conditions, it has a storage life of at least two years from the date of manufacturing. Epotec YDF 173 may become hazy or crystallize upon long storage especially when exposed to low temperatures. The resin can be restored to its original condition by warming to 55-60°C while stirring. For handling or pumping the maximum temperature recommended is 80°C.

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**Handling** For more instructions on storage and handling of epotec YDF 173 please refer to the MSDS of the product.

### Disclaimer

All recommendations for use of our products whether given by us in writing, verbally or to be implied from the results of tests carried out by us are based on the current state of our knowledge. Although, the information contained in this sheet is accurate, no liability can be accepted in respect of such information. We warrant only that our product will meet the designated specifications and make no other warranty either express or implied, including any warranty of merchantability or fitness for a particular purpose as the conditions of application are beyond our control.

**For Additional Information, Please Contact:**

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