


**Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)**
**EPOTEC YDF 170**
**Description**

Epotech YDF 170 is general-purpose unmodified low viscosity diglycidyl ether of bisphenol-F. In addition to offering advantage in terms low viscosity, epotech YDF 170 provides better chemical resistance & flexibility when compared to similar bisphenol-A based liquid resin.

Epotech YDF 170 is compatible with all common epoxy resins in all ratios. A blend of epotech YDF 170 with bisphenol-A based liquid resin has better resistance to crystallization compared to unmodified base resins. Blending of epotech YDF 170 into std. bis-A based liquid epoxy resin brings down viscosity without affecting performance parameters unlike reactive diluent modified resin that affects mechanical, chemical and thermal resistance of the system.

**Applications**

- Solvent based, high solids and solvent free coatings
- Adhesives
- Civil engineering and construction industry
- Automotive coatings
- Coil coatings
- Marine and Industrial protective coatings
- Tooling, potting, casting and molding compounds
- Composites

**Specification**

Appearance	Visual	Clear, colourless to light yellow viscous liquid
Colour	ASTM D 1544-04	3 G max.
Epoxy Equivalent weight	ASTM D 1652-04	160 - 180 g/eq
Viscosity* 25 °C	ASTM D 2196-05	2,000 - 5,000 cP
Hydrolysable Chlorine	ASTM D 1726-03	0.1 % Max.

\*Brookfield viscosity

**Typical properties \***

Epoxide Value	ASTM D 1544-04	5.55 – 6.25
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

&gt; 150°C

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\* = Typical properties are indicated for information only

**General information**

The better chemical resistance of bisphenol-F based resin epotec YDF 170 can be attributed to its slightly higher functionality of 2.0 - 2.1 compared with functionality of 1.9 - 2.0 of standard bisphenol-A based liquid epoxy resin epotec YD 128. Epotec YDF 170 can be used in various applications to make trowelable floors, mortars, grouts, coatings etc. It has excellent adhesion to various surfaces and maintains its adhesion under wider temperature fluctuations.

**Packing**

Epotec YDF 170 is packed and delivered in steel drums, 220 kg per drum as a standard pack.  
Other packs are available upon request.

**Storage**

Epotec YDF 170 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 170 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.

**Handling**

For more instructions on storage and handling of epotec YDF 170 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:****Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)**Mahatun Plaza Bldg., 16<sup>th</sup> Floor 888/167 Ploenchit Road, Lumpini, Bangkok 10330 Thailand.

Tel: (662) 2535031-3, Fax: (662) 2535030

Web Site: [www.adityabirlachemicals.com](http://www.adityabirlachemicals.com), E-Mail: [epoxymktg@adityabirla.com](mailto:epoxymktg@adityabirla.com)