


**Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)**
**EPOTEC TW 5002**
**Description**

Epotec TW 5002 is an aqueous dispersion of type 1 solid bisphenol A epoxy resin. The dispersion uses proprietary emulsifier and is supplied at 55% solids in water and organic co-solvent. It has medium viscosity and is completely water reducible.

Epotec TW 5002 contains internal emulsifier rather than external emulsifier. This built in emulsifier gives many advantages over externally emulsified products available on market in terms of improved stability, reduced water sensitivity.

Epotec TW 5002 can be formulated suitably into sizing for glass fibers. The sizing dramatically improves the handling of the glass strands and protects the glass filaments from abrading and breaking. It also improves the fibre wet out and the adhesive bond at fabric-matrix interface. Epotec TW 5002 can also be used to make protective coatings by curing with appropriate curing agents. In coating epotec YD 5002 gives faster drying due to lacquer drying effect.

**Applications**

- Fibre Sizing
- Protective coatings for steel
- Protective coatings for concrete
- Adhesives
- Textile binder

**Specification**

| Appearance               | Visual         | White / Milky emulsion |
|--------------------------|----------------|------------------------|
| Epoxy Equivalent weight* | ASTM D 1652-04 | 485 - 555 g/eq         |
| Viscosity**@25°C         | ASTM D 2196-05 | 7,000 - 17,000 cP      |
| Non-volatile content     | ASTM D1259-06  | 54 - 56 %              |

\* Based on solids

\*\*RVT Brookfield viscometer, spindle 5, 10 rpm

**Typical properties**

|                       |                |             |
|-----------------------|----------------|-------------|
| Epoxy content         | ASTM D 1652-04 | 1.80 - 2.06 |
| Density @25 °C        | ASTM D 1475-98 | 1.09 g/ml   |
| Freeze thaw stability | ---            | > 5 cycles  |
| Solvent               | ---            | Water       |
| Co-solvent            | ---            | 9 - 11 %    |

**Packing**

Epotec TW 5002 is packed and delivered in plastic drums, 200 kg net per drum as a std. packing.  
Other packing is available on request.

---

**Storage**

Epoxy dispersions should be stored in their original tightly closed containers at temperatures between 5 to 35°C. **Do not freeze the product.** Do not leave the product uncovered for extended periods of time. When stored properly epotec TW 5002 has a shelf life of at least 6 months from the date of manufacture. After extended periods of storage some sedimentation may occur. In such case it is recommended to homogenize the emulsion by gentle agitation prior to use.

---

**Handling**

For more instructions on storage and handling of epotec TW 5002 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)