


Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)
EPOTEC THW 4505
Description

Epotec THW 4505 is a waterborn curing agent designed especially for use in coating application, it low viscosity, good film forming and flow characteristics allows the formulation of highly filled. In this application epotec THW 4505 gives excellent performance in combination with liquid epoxy resin epotec YDFM 253. Epotec THW 4505 is available 70% solids in water. It others capability to formulate V.O.C. free systems even for confined areas. It can also be used with other modified liquid epoxy resins.

Applications

- Visible end pot life
- Rapid hardness development
- Low free amine content
- Temperature and shear stable

Advantages

- Provide V.O.C. free product
- Concrete sealer and primer
- Concrete floor and wall coating
- Good slip and scratch resistance
- Fast drying

Specification

| | | |
|-----------------|----------------|--------------------|
| Appearance | Visual | Pale yellow liquid |
| Colour | ASTM D 1544-04 | 14.0 G max. |
| Viscosity @25°C | ASTM D 2196-05 | 15,000-25,000 cP |
| Amine value | DIN 16945 | 260 – 285 mgKOH/g |

Typical properties *

| | | |
|-------------------------------|--------------|------------------|
| AHEW | --- | 204 g/eq |
| Pot life (150 g mix) @ 25°C** | TEC-AS-P-111 | 75 - 110 minutes |
| Non-volatiles | TEC-AS-C-012 | 70 ± 2 % |

TECHNICAL DATA SHEET (PROVISIONAL)

| | | |
|--|-------------|-------------|
| Mixing ratio with epotec YD 128 (EEW = 186 g/eq) | --- | 100 : 110 |
| Density @25°C | ASTM D 1475 | 1.10 gm/cc |
| Thin film set time @ 25°C | ASTM D 5895 | 3 - 4 hours |
| Flash point | ASTM D 93 | > 100°C |

* = Typical properties are indicated for information only
 **=Epotec THW 4505:Epotec YD128: water 56:51g:43 g

Guideline formulation

Top coat

| Sr. No. | RM | Qty. pbw |
|---------|---|--------------|
| 1. | Epotec THW 4505 ¹ | 55 |
| 2. | Disper byk 194 ² BYK 012 ² | 2 0.4 |
| 3. | TiO ₂ R-960 BaSO ₄ | 42.5 42.5 |
| 4. | Water | 67 |
| 5. | Epotec YDFM 253 ¹ | 50 |

¹ = Aditya Birla Chemicals, Thailand

² = BYK Chemie, Germany

Properties

| | | |
|-----------------|----|-------------------|
| Recommended PHR | = | 110 |
| Pot life @25 °C | = | 4 hrs |
| %Solids | = | 60 |
| %Water | = | 40 |
| V.O.C | .= | nil |
| %PVC | = | 20 |
| Appearance | = | Smooth,high gloss |
| DFT | = | 150 μ |
| Gloss 60/85 | = | 95/102 |

Packing

Epotec THW 4505 is packed and delivered in plastic drums, 200 kg each as a standard pack.
Other packs are available on request.

Storage

Epotec THW 4505 is stable in normal storage conditions. The shelf life of epotec THW 4505 is 12 months from the date of manufacture in original sealed container. It is advised to store the material in cool and dry place away from sources of heat, direct sunlight and ignition. **It is advised not allow to freeze the product.**

Handling

Please refer to the product MSDS for more information on safe storage and handling of epotec THW 4505.

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:

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