Grasim Industries Ltd. (Epoxy Division)

EPOTEC TH 7301

Description

Epotec TH 7301 is a low viscosity, low colour modified cycloaliphatic polyamine curing agent for use with liquid epoxy resins such as epotec YD 128 to produce solvent free room temperature curable thermoset coatings, floor toppings. When formulated appropriately with epoxy resin it gives clear, air free, glossy surfaces. It also provides resistance to variety of chemicals such as acids, alkalies, hydrocarbons and water. Epotec TH 7301, being cycloaliphatic, also provides excellent weather resistance. It is less irritating, gives low odour, excellent transparency and light colour.

Applications

- Solvent-free, high solids coatings
- Self leveling floorings
- Primers and screeds
- Transparent coatings
- Chemical resistant mortars and linings

Specification

Appearance	Visual	Clear, light yellow liquid
Colour	ASTM D 1544-04	1 G max.
Viscosity* @25°C	ASTM D 2196-05	270 - 380 cP
Pot life# @25°C	TEC-AS-P-111	28 - 45 min

* Brookfield viscometer # with epotc YD 128

Typical properties *

Odour	---	Amine
Density @25°C	ASTM D 1475-98	1.03 g/cc
Amine value	DIN 16945	260 - 285 mg KOH/g
AHEW	---	~ 115
PHR with epotec YD 128 (EEW ~ 190 g/eq)	---	60 wt. %
Flash point	ASTM D 93	100°C
Thin film set time		6 - 8 hr
Glass transition temperature	DIN 11357	50°C

Tensile strength	ASTM D 638-86	510 kg/cm^2
Flexural strength	ASTM D 638-86	890 kg/cm^2
Compressive strength	ASTM D 695-85	650 kg/cm^2

* = Typical properties are indicated for information only

Additional information Chemical resistance[1] with variety of epoxy resins

Chemical	Epotec YD 128[2]		Epotec YDF 170[3]		Epotec YDPN 661[4]	
	7 days	28 days	7 day	28 days	7 day	28 days
Water	R	R	R	R	R	R
Methanol	R	A	R	A	R	R
Ethanol	R	R	R	R	R	R
Toluene	R	R	R	R	R	R
Xylene	R	R	R	R	R	R
Petrol	R	R	R	R	R	R
Methyl ethyl ketone	R	A	R	A	R	R
5% Lactic acid	R	R	R	R	R	R
10% Acetic acid	A	D	R	D	R	D
30% Sulfuric acid	R	A	R	A	R	R
50% Sodium hydroxide	R	R	R	R	R	R

[1] = Curing schedule 25°C / 7 days
[2] = Standard Bisphenol A epoxy resin, EEW 186 g/eq
[3] = Standard Bisphenol F epoxy resin, EEW 170 g/eq
[4] = Multifunctional epoxy resin

R = Resistant
A = Attacked
D = Damaged

Guideline formulation Self leveling flooring

Part A

Epotec YD 515	100
Air release/De-foaming agent	4
Dispersing/Wetting agent	4
TiO2	12
CaCO3	87
Silica floor	87

Part B

Epotec TH 7301	60

Properties

Pot life	35 min
Dry thickness	3 mm
P:B ratio	1.2 : 1
Shore D hardness Day 1	63
Day 2	68
Day 7	76
Compressive strength	41 MPa

Packing

Epotec TH 7301 is packed and delivered in plastic drums, 200 kg per drum as a standard pack.
Other pack sizes are available on request.

Storage

Epotec TH 7301 should be stored in original tightly closed container, in dry and cool conditions. When exposed to air the product epotec TH 7301 may absorb moisture which may result in viscosity increase, frothing and white carbonation product deposition. In such case it may affect the appearance of final coating/floor topping. When stored in tightly closed container this product has a storage life of at least one year from the date of manufacturing.

Handling

Do not mix with epoxy resin until just prior to use since reacts chemically at room temperature. Avoid contact with skin, eyes etc. Please refer to the MSDS of the product for more instructions on safe storage and handling of epotec TH 7301.

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:
Grasim Industries Ltd. (Epoxy Division)
Village: Vilayat, Tehsil: Vagra, Dist: Bharuch (Gujarat), India
Tel: +91 8154007544
Web Site: www.adityabirlachemicals.com E-Mail: epoxymktg@adityabirla.com