


Aditya Birla Chemicals (Thailand) Ltd. (Epoxy Division)
EPOTEC YD 120
Description

Epotec YD 120 is a medium viscosity modified diglycidyl ether of bisphenol-A containing calculated amount of reactive diluent. The reactive diluent in the product blend improves the crystallization resistance of the standard liquid epoxy resin. It has been also noticed that this modification also improves the wetting and adhesion properties of the product. A wide variety of curing agents can be employed to cure this resin including aliphatic amines, amides, cycloaliphatic amines etc.

Applications

- Low VOC , high solids coatings
- Adhesives
- Civil engineering applications

Specification

Appearance	Visual	Clear, colourless to light yellow liquid
Colour	ASTM D 1544-04	0.5 G max.
Epoxy Equivalent weight	ASTM D 1652-04	190 – 210 g/eq
Viscosity @25°C	ASTM D 2196-05	4,000 – 6,000 cP
Hydrolysable Chlorine	ASTM D 1726-03	0.1 % max.

Typical properties *

Epoxide Value	ASTM D 1652-04	4.76 – 5.26
Density @25°C	ASTM D 1475-98	1.14 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	135°C

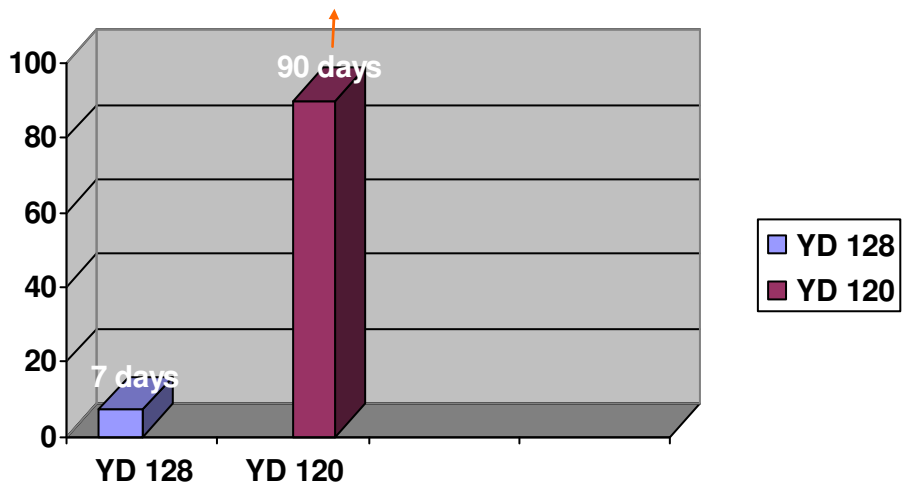
* = Typical properties are indicated for information only

General information :

Property	Test Method	Unit	Specification	
			YD 120	YD 128
EEW	ASTM D1652	g/eq	190-210	186-194
Visco. @25°C	ASTM D2196	P	40 – 60	110 – 140
PHR with				
TH 7301	-	m/m	55	60
TH 7901	-	m/m	51	55
TETA	-	m/m	11	12
Gel time @25°C (100 gm mix)				
TH 7301	-	min	42	35
TH 7901	-	min	31	26
TETA	-	min	23	34
Tg after 7 days cure at room temperature				
TH 7301	ASTM D3418	°C	50	57
TH 7901	ASTM D3418	°C	50	53
TETA	ASTM D3418	°C	55	54
Tg after 7 days cure at room temperature				
TH 7301	ASTM D3418	°C	65	75
TH 7901	ASTM D3418	°C	54	65
TETA	ASTM D3418	°C	98	126

Crystallization resistance study –

Epotec YD 120 and epotec YD 128 were tested for crystallization resistance as per ISO 4895. Epotec YD 128 was found crystallizing within 7 days whereas epotec YD 120 was found remaining in fluid state well beyond 90 days.



Packing

Epotec YD 120 is packed and delivered in steel drums, 220 kg per drum as a standard pack.
Other packs are available on request.

Storage

Epotec YD 120 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 YD 120 has good resistance to crystallization. In case after pro-longed storage especially at low temperatures if the product becomes hazy, 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

Please refer to the MSDS of the product for more instructions on safe storage and handling of epotec YD 120.

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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