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## SHOWA HIGHPOLYMER SINGAPORE PTE.LTD

2 Shenton Way #15-03/04 SGX Centre 1 Singapore 068804 <u>Tel:(65)6223</u> 1889 , Fax:(65)6223 6007

# **SH 8000**

## 1.General Description

**SH 8000** is Vinyl Ester Resin , and suitable for making quick curing type for filament winding , hand lay-up and spray up moulding. And also this resin have the good property for anti-corrosion , chemical resistance tank ,pipe and fitting...etc. Especially recommenced for Chemical Engineering , due to excellent performance on strength properties. But this resin is not suitable for clear transparent casting purpose is not recommended.

## A) Properties of liquid SH 8000

TEST ITEMS	TEST METHOD		
Appearance	JIS K 6901	Viscosity Liquid	
Viscosity(Ps/30°C)	JIS K 6901	4 - 5	
Specific Gravity(30°C)	JIS K 6901	1.048	
Gel Time(minute/30°C)	JIS K 6901	15 -25	
Monomer Content(%)	ISO 3252 - 1974	45±2	
Mineral Content(%)	DIN 1645 - 1976	Max. 0.05	
Linear Curing Shrinkage(%)	ASTM D 2566-69	1.9 ~ 2.1	

#### B) Properties of cured SH 8000

PROPERTY	TEST METHOD		
Density	ASTM C905-01	1.033g/cm <sup>3</sup>	
Barcol Hardness	ASTM D2583-07	39BHC	
<b>Heat Distortion Temperature</b>	ASTM D648	103 degree C	
Glass Transition Temperature	ASTM E1356-03	106 degree C	
Water Absorption	ISO/R 62-1980	Max. 80mg	
Elongation	ASTM D638	5-6 %	
Tensile Strength	ASTM D638	75 Mpa	
Tensile Modulus	ASTM D638	3.49 Gpa	
Flexural Strength	ASTM D790	135 Mpa	
Flexural Modulus	ASTM D790	3.09 Gpa	

## 2. Curing table

Temperature (°C)	Curing agent (% v/w)	0.5% (Co-Nc-6%)	Gel time (min)	Curing time(min)
25	2.0	0.5	15-20	30-45
30	1.5	0.5	15-20	30-45
35	1.5	0.5	15-20	30-45

<sup>\*</sup>Curing agent : Akperox A-50

- a) Please take note that if curing agent and Co are added at the same time or come into contact with each other, there is a danger of fire and explosion.
- b) Pot gel time as stated above is a guideline, it is not a guarantee. Before use, please check the pot gel time.

## 3. Packing

\*200kg/drum

#### 4. Shelf life

After production, will expire 6 months later.

Remark:

The temperature of your warehouse must keep less than 25°C

## 5. Safekeeping

- \*Set SH8000 away from ignition sources (flame, fire, sparks, any)
- \*No smoking in the warehouse and also storage area
- \*keep SH8000 out of the sun
- \*SH8000 must separate from hardener and oxidizing materials, promoter regarding storage area
- \*Care high humidity in the warehouse
- \*Due to keep the quality and same properties of SH8000, it must be stocked less than 25°C in your warehouse
- \*Due to keep the temperature and also air circulation in your whole warehouse, please install a ventilator and a fan inside of top roof
- \*Please keep and follow our safety data sheet

#### Note:

- \*All data is just technical data and also don't be guaranteed curing resin and laminated product by SH8000
- \*if necessary to be any other information, please contact our PIC of your own country

<sup>\*</sup>Usage instruction:

a) Add in Co & DMA mix and stir thoroughly

b) Next, add in the curing agent, stir and mix well

<sup>\*</sup>Remarks

<sup>\*</sup>Packed in the steel drum of standard size