

1. Type

**Non-Promoted, Non-Waxed, Vinylester type
Gel-coat resin.**

2. Use

POLYSTAR UG-850 is vinylester type Gel-coat Resin
Which is designed for the production of mold.

3. Distinguishing Characteristics

- Good heat resistance
- Good solvent resistance.
- Good boiling water resistance.
- * Good impact resistance.

4. Typical Properties:Liquid Resins *1

	Units	Spec	Remarks
Viscosity	Poise/25°C	17 – 25	#4, 60 rpm
Thixotropic Index	-	4.0 – 4.5	6/60 rpm
Gel-time	Min	18 - 27	6%Co-N 0.5 phr MEKPO 1.0 phr at 25°C

*1. Values are representative.

Specification limits are available upon request.

5. Typical Properties: Cured Resin *2

	Unit	Results	Remarks
Tensile Strength	MPa	70	ASTM D 638
Elongation	%	3.5	
Flexural Strength	MPa	90	ASTM D 790
Flexural Modulus	GPa	3.5	
Barcol Hardness	-	42	ASTM D 2583
Heat Distortion Temp.	°C	115	ASTM D 648
Water absorption	%	0.1	ASTM D 570

*2. Thickness : 3 mm

Promoter : 6% Co-N 1.0 phr

Catalyst : 55% MEKPO 1.0 phr

Post Cure : 25°C 6hrs, 80°C 4hrs

6. Caution Rules at Hardening

- The Gel-time is a change working conditions (ex. temperature, humidity). Please adjust amount of hardener & promoter according to working conditions, before use.
- The hardener amount is appropriate 1% of resin for suitable hardening.
- As hardening can be delayed according to work temperature, you should use it in proper temperature.

7. Caution Rules at Use

- Keep it at the place that can cut off heat, light. Please pay attention to firearms.
- As a hardener can explode, Please keep it at the place that can avoid the heat, a shock, A direct sunlight.
- If hardener and promoter come directly in contact, they can explode. You should not keep together at all it.
- Put on gloves and a mask when you work.
- Ventilate a workplace at any time.
- After use, residual resin should seal.
(Water, dust get into the resin or Styrene monomer evaporates, and the resin can be degenerated.)
- Styrene uses below 3percents in order to adjust viscosity.
- Please use the amount that use is possible only within work time.
- If the resin or a hardener get into worker's eyes, Please wash eyes immediately more than 15 minutes with running water and get from prescription of a doctor.
- Do not leave the Resin at the place of direct sunlight or heat.

169, Taehwa-Dong, Daeduk-Gu, Taejon, R.O Korea TEL)042-625-2541 FAX)042-634-7543

For more information regarding safe & health, please refer MSDS providing in our companies.

The company cannot accept liability for use the technical data for anything other than reference.