

## 1. Type

**Non-Promoted, Non-Waxed, ISO, NPG type unsaturated polyester Gel-coat.**

## 2. Use

**POLYSTAR UG-270** is ISO type Gel-coat for the production of Fishing Boat and General FRP products.

## 3. Distinguishing Characteristics

- Good Weather Resistance
- Good workability
- Good Glossy Surface

## 4. Typical Properties: Liquid Resins \*1

	Units	Spec	Remarks
<b>Viscosity</b>	Poise/25°C	17 – 40	#4, 60 rpm
<b>Thixotropic</b>	-	3.5 – 5.0	6/60 rpm
<b>Gel-time</b>	min	6 - 22	P6O 0.5phr MEKPO 1.0 phr at 25°C

\*1. Values are representative.

Specification limits are available upon request.

## 5. Typical Properties: Cured Resin(B/R) \*2

	Units	Results	Remarks
<b>Tensile Strength</b>	MPa	65	
<b>Tensile Modulus</b>	GPa	3.4	ASTM D 638
<b>Elongation</b>	%	1.8	
<b>Flexural Strength</b>	MPa	129	ASTM D 790
<b>Flexural Modulus</b>	GPa	3.7	
<b>Barcol Hardness</b>	-	47	ASTM D 2583
<b>Heat Distortion Temp.</b>	°C	90~100	ASTM D 648
<b>Water absorption</b>	%	0.1	ASTM D 570

\*2. Thickness : 3 mm

Catalyst : 55% MEKPO 1.0 phr

Post Cure : 100°C 2hrs, 120°C 2hrs

## 6. The term of guarantee

-3 month

-Do not leave the Resin at the place of direct sunlight or heat.

## 7. 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.

## 8. 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.

- If the resin or a hardener gets into worker's eyes, please wash eyes immediately more than 15 minutes with running water and get from prescription of a doctor.