

**POLYSTAR R 301NT  
RESIN FOR LAMINATING****R301NT**

**TYPE** : Promoted, Thixotropic and Non-waxed Iso type Resin.

**USES** : R301NT is formulated for the production of reinforced plastic products by the spray-up and hand lay-up technique.

**DISTINGUISHING CHARACTERISTICS** :

Extremely fast wet out and roll out.  
Good cure in thin sections.  
Good impregnation.  
Good adhesion with gel coat.

**TYPICAL PROPERTIES** :**Uncured Resin**

Test	Resin	R301NT
Viscosity, 25°C *1		1000 ~ 1500 cps
Thixotropic Index		2.8 ~ 3.2
Specific Gravity, 25°C		1.10
Curing Property, 25°C *2		
Gel-Time		30 ~ 40 minutes
Time to peak		45 ~ 70 minutes
Peak Exothermic Temp.		130 ~ 160 °C

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\*1. Specification limits are available upon request.

\*2. M-50 : 2.0 PHR

# R301NT

## Cured Resin \*3

Test \ Resin	R301NT
Tensile Strength(kgf/mm <sup>2</sup> )	6.0
Tensile Modulus(kgf/mm <sup>2</sup> )	320
Flexural Strength(kgf/mm <sup>2</sup> )	11.7
Flexural Modulus(kgf/mm <sup>2</sup> )	420
Elongation (%)	1.7 %
Barcol Hardness, 934-1	48
Heat Distortion Temp.	85~95 °C

## Laminated Physical Properties \*4

	ORCA 301
Tensile Strength(kgf/mm <sup>2</sup> )	11.5
Tensile Modulus(kgf/mm <sup>2</sup> )	780
Flexural Strength(kgf/mm <sup>2</sup> )	17.7
Flexural Modulus(kgf/mm <sup>2</sup> )	850
Elongation (%)	1.4 %

\*3. M-50 : 2.0 PHR  
 After Cure : 80°C × 2hrs, 120°C × 2hrs

\*4. M-50 : 2.0 PHR  
 #450 CSM 3 ply, G/F content = 33%  
 After Cure : 80°C × 2hrs, 120°C × 2hrs