

**TECHNICAL DATA SHEET****MP-001****Pre-accelerated Thixotropic Unsaturated Polyester Resin**

<b>SPECIAL PROPERTIES AND USE</b>	<b>SPECIFICATION</b>	
High reactivity, low viscous pre-accelerated, thixotropic, non-wax type unsaturated polyester resin dissolved in styrene.	Appearance	Pink, cloudy liquid
	Acid Value ( as mg. KOH/1g. Resin )	15 - 25
<b>GENERAL PROPERTIES</b> MP-001 is a high reactive unsaturated polyester resin exhibiting good hardness, toughness, and impact resistance The thixotropic of MP-001 will give anti-sag when it is applied on vertical or leaned surfaces.	Viscosity ( mPa.s ) ( Brookfield, LVT, 25° C )	250 - 450
	Non-volatile ( % )	58 - 62
	Gel time ( Min. ) ( 2%MEKPO-50, 25° C )	9.00 - 13.00
	Thixotropic Index ( at 25° C )	1.5 - 3.0
<b>APPLICATIONS</b> MP-001 is a general purpose unsaturated polyester resin developed for fiber glass reinforce plastic ( FRP ) products such as containers, cooling tower, septic-tank, pipe, etc., for applying by hand lay-up and spray molding.	Flash Point ( ° C ) ( DIN 53213 )	34
<b>PACKING AND STORAGE</b> Steel drum, net weights 225 kg.	<b>STORAGE STABILITY</b> MP-001 must be kept away from sources of ignition and heat and not in direct sunlight. It is recommended the storage temperature should not excess 25°C At 25°C (no access of air and light) storage stability is more than 6 months.	

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**PHYSICAL PROPERTIES of cured MP-001**

<u>PROPERTY</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TEST METHOD</u>
Specific gravity, 25°C	1.12	g/cm <sup>3</sup>	ASTM-D-792
Barcol Hardness	30	-	J-934-1
Elongation	3	%	ASTM-D-638
Flexural strength	12	kgf./mm <sup>2</sup>	ASTM-D-790
Flexural modulus	260	kgf./mm <sup>2</sup>	ASTM-D-790
Tensile strength	6	kgf./mm <sup>2</sup>	ASTM-D-638
Tensile modulus	218	kgf./mm <sup>2</sup>	ASTM-D-638
Compressive strength	13.5	kgf./mm <sup>2</sup>	ASTM-D-695
Water absorbtion ( 24 hrs.)	0.14	%	ASTM-D-570

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**MECHANICAL PROPERTIES of MP-001 fiber glass laminate, with 30% chopped strand mat**

<u>PROPERTY</u>	<u>VALUE</u>	<u>UNIT</u>	<u>TEST METHOD</u>
Barcol Hardness	45	-	J-934-1
Elongation	2.5	%	ASTM-D-638
Flexural strength	24	kgf./mm <sup>2</sup>	ASTM-D-790
Flexural modulus	710	kgf./mm <sup>2</sup>	ASTM-D-790
Tensile strength	12.5	kgf./mm <sup>2</sup>	ASTM-D-638
Tensile modulus	440	kgf./mm <sup>2</sup>	ASTM-D-638
Water absorbtion ( 24 hrs.)	0.16	%	ASTM-D-570

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The information given herein and otherwise supplied to users is based on our general experience and, where applicable, on the results of test on samples of typical manufacture, However, because of the many factors which are outside knowledge and control, which can effect the use of these products, users may rely on their own judgement and we cannot accept liability for any injury, loss or damage resulting from reliance upon such information