## **Technical Data Sheet**



Farapol Jam Chemical Indus. Co.

## **FARAPOL O 140**

Product Description	Farapol O 140 is an Amine-Accelerated Unsaturated Polyester Resin-based Orthophthalic Anhydride and standard Glycols, dissolved in and cross-linked with Styrene Monomer. The product is high adhesive, high filler acceptance, high chemical resistance and fast-curing unsaturated polyester resin.					
Applications and Use	This resin specially is designed for Mast	tics.				
Certificates and Approvals	Farapol O 140 is manufactured from raw materials listed in FDA regulation Title 21 CFR 177.2420. Farapol Jam Chemical Industrial Company carries out the production, quality control, and distribution of this resin in compliance with ISO 9001, 14001, 45001, 10002, 10004, 10015, and 17065 standards.					
Typical Liquid	Property @ 25 °C	Unit	Specification	Method		
Resin Properties	Viscosity Brookfield <sup>1</sup>	cps	380 - 410	ISO 2555		
	Acid Value	mgKOH/g	35-45	ASTM D 1639		
	Solid Content	%	63 - 65	ISO 3251		
	Color	Gardner	Max 5	ASTM D 1544		

Gel Time and viscosity can be adjusted as per customer requirements.
 Gel time measuring formulation used: (1.0 phr Benzoyl Peroxide 50%).

relative

minute

1.11-1.13

20 - 24

ISO 2811

ASTM D 2471

Specific Gravity

Gel Time<sup>2</sup>



Typical Casted Resin Properties <sup>3</sup>	Property	Unit	Specification	Method			
	Tensile Strength	MPa	Min 70	ISO 3268, ASTM D638, ISO 527-2&4			
	Elongation at Break	%	Min 3.0	ISO 3268, ASTM D638, ISO 527-2&4			
	Tensile Modulus	GPa	Min 3.0	ISO 3268, ASTM D638, ISO 527-2&4			
	Flexural Strength	MPa	Min 120	ISO 178/ASTM D 790			
	Flexural Modulus	GPa	Min 3.0	ISO 178/ASTM D 790			
	Heat Distortion Temperature	<sup>0</sup> C	Min 75	ISO 75			
	Barcol Hardness	Barcol	Min 45	ASTM D 2583			
	Water Absorption	%	$\approx 0.30$	ISO 62- Test Method 3			
	Linear Shrinkage <sup>4</sup>	%	$\approx 1.8$	Internal method			
	<ul> <li>3) Materials used for curing are: (2.0 phr Benzoyl Peroxide 50%). Curing Time is 24 hrs at Room Temperature and 3 hrs at 8 °C.</li> <li>4) This test is done on the linear sample with dimensions (1 cm × 1 cm × 100 cm).</li> </ul>						
Handling, Storage and Stability	FARAPOL O 140 is a product sensitive to temperature, Light, and oxidation. Hence, it should be stored indoors in a dry place at a temperature between 5 and 25°C. Keep always in the original, unopened, and undamaged containers. Avoid keeping material exposed to sunlight. On storage under the conditions mentioned above, the shelf life for FARAPOL O 140 is 6 months.						
Healthy and Safety	Avoid storing the resin along with Metallic Driers and Peroxides in the same area. Safety Datasheets of the product are available on demand. The user is responsible to familiar with the material handling and safety datasheet before using the product.						
Packaging	Farapol O 140 is supplied in 200 Kg steel barrels and IBC tanks.						
Notice	The information contained herein is provided in good faith and is to the best of our knowledge accurate, but we assume no liability for its accuracy or completeness. Therefore, the buyer is advised to determine the suitability of this product for the intended use. We retain the right to make any changes according to technological progress or further developments.						
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