Technical Data Sheet



Farapol Jam Chemical Indus. Co.

FARAPOL O 135-A

Product Description	Farapol O 135 is an Amine-accelerated Unsaturated Polyester Resin based on Orthophthalic Anhydride and standard Glycols, dissolved in and cross-linked with Styrene Monomer. The product has high adhesion, high filler acceptance, high chemical resistance and It is a fast cure unsaturated polyester resin. Farapol O 135-A is a highly reactive unsaturated polyester resin that cures at low temperatures, even as low as 0 °C, producing transparent and hard polymers.
Applications and Use	This resin is specially designed for producing mastics used in all types of marbles, stones and granites. The mastics can be used for filling pores and cracks and repairing surface of the stones.
Certificates and Approvals	Farapol O 135 is synthesized 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 ¹	cps	290 - 330	ISO 2555
	Acid Value	mgKOH/g	40-44	ASTM D 1639
	Solid Content	%	65 - 67	ISO 3251
	Color	Gardner	Max 3	ASTM D 1544
	Specific Gravity	relative	1.11-1.13	ISO 2811
	Gel Time ²	minute	18 - 20	ASTM D 2471

Gel Time and viscosity can be adjusted as per customer requirements.
 Mix ratio for measuring Gel Time: (1.0 phr Benzoyl Peroxide 50%).



Typical Casted	Property	Unit	Specification	Method		
Resin Properties ³	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 130	ISO 178/ASTM D 790		
	Flexural Modulus	GPa	Min 4.0	ISO 178/ASTM D 790		
	Heat Deflection Temperature (HDT)	⁰ C	Min 60	ISO 75-2 Test Method A		
	Barcol Hardness	Barcol	Min 40	ASTM D 2583		
	Water Absorption	%	≈ 0.30	ISO 62- Test Method 3		
	Linear Shrinkage ⁴	%	≈ 1.8	Internal method		
	3) Materials used for curing are: (1.0 phr Benzoyl Peroxide 50%). Curing Time is 24 hrs at Room Temperature and 3 hrs at 80 °C.					
	4) This test has been done on the specime	n with linear dir	mensions (1 cm \times 1 cm \times	100 cm).		
Handling, Storage and Stability Healthy and Safety	 FARAPOL O 135 is a product that is 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 135 is 6 months. 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 fully responsible for reviewing the material's Safety Data Sheet (SDS) and understanding proper handling procedures prior to using the product. 					
Packaging	Farapol O 135 is supplied in 200 Kg steel barrels and IBC tanks.					
Notice	The information contained herein is provided in good faith and is with the best of our accurate knowledge, 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. Please note that variations in testing conditions across different laboratories may result in discrepancies, and a tolerance of up to 5% in test results should be expected. Farapol Jam Company reserves the right to modify the information in this document at its discretion. The latest version available on the Farapol website is considered valid, and any previous versions are void.					
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Contact Information		ax: +98 21 26 mail:info@fara				