Technical Data Sheet

Farapol Jam Chemical Indus. Co.

FARAPOL O 141

Product Description

Farapol O 141 is an Orthophthalic-based unsaturated polyester resin dissolved in styrene, non-accelerated and non-thixotropic. It has low to medium viscosity, medium reactive, good impregnation to glass fiber and good process abilities.

Applications and Use

Farapol O 141 specially is formulated and designed for manufacturing all types of car cabins.

Certificates and Approvals

Farapol O 141 is manufactured from raw materials listed in FDA regulation Title 21 CFR 177.2420. Farapol Jam Chemical Industrial Company carries out this resin's production, quality control, and distribution in compliance with ISO 9001, 14001, 45001, 10002, 10004, 10015, and 17065 standards**.**

Typical Liquid Resin Properties

Property @ 25 ºC	***Unit***	***Specification***	***Method***
Viscosity Brookfield[1]	cps	400-500	ISO 2555
Acid Value	mgKOH/g	Max 30	ASTM D 1639
Solid Content	%	65 - 68	ISO 3251
Color	Gardner	Max 2	ASTM D 1544
Specific Gravity	relative	1.11-1.13	ISO 2811
Gel Time[1]	minute	15 - 20	ASTM D 2471
Exothermic Peak Temperature	ºC	145-160	ASTM D 2471

1) Gel Time and Viscosity can be adjusted as per customer requirements.

Gel Time Behavior of Resin[2]

Temperature (ºC)	***18***	***25***	***30***
Gel Time (minute)	27-32	15-20	10-14

2) Gel time measuring formulation used: (Cobalt Octoate Farapol C 9010 1%- 1.0 phr, Akperox A60 1.0 phr).

Typical Casted Resin Properties[3]

Property	*Unit*	*Specification*	*Method*
Tensile Strength	MPa	Min 55	ISO 3268, ASTM D638, ISO 527-2&4
Elongation at Break	%	Min 4.0	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 110	ISO 178/ASTM D 790
Flexural Modulus	GPa	Min 3.0	ISO 178/ASTM D 790
Heat Distortion Temperature	^{0}C	Min 50	ISO 75
Barcol Hardness	Barcol	Min 45	ASTM D 2583
Water Absorption	%	≈ 0.20	ISO 62- Test Method 3
Overall Shrinkage[4]	%	≈75	ISO 3521

3) Materials used for curing are: (Cobalt Octoate Farapol C 9010 1%- 1.0 phr, Akperox A60 1.0 phr). Curing Time is 24 hrs at Room Temperature and 3 hrs at 80 ºC.
4) This test is done on the linear sample with dimensions (1 cm × 1 cm × 100 cm).

Handling, Storage and Stability

FARAPOL O 141 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 above-mentioned conditions, the shelf life for FARAPOL O 141 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 141 is supplied in 200 Kg steel barrels, IBC tanks and bulk road tankers.

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.

Document Registration

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