

### **Technical Data Sheet**

Farapol Jam Chemical Indus. Co.

### **FARAPOL O 132**

#### **Product Description**

The plasticizing and flexibility modifier resin of FARAPOL is Farapol O 132, an unsaturated polyester resin based on Orthophthalic anhydride and standard glycols, dissolved in and cross-linked with Styrene Monomer, having the capability to be used for obtaining more flexible products by adding into polyester and gel coat and topcoat.

## **Applications and Use**

This resin can be used as a property-modifying additive in all types of unsaturated polyester resins and its derivatives. This resin improves resilience and impact strength and is compatible with most general-purpose and Isophthalic resins.

# Certificates and Approvals

Farapol O 132 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 °C	Unit	Specification	Method
Viscosity Brookfield <sup>1</sup>	cps	500 - 650	ISO 2555
Acid Value	mgKOH/g	20-30	ASTM D 1639
Solid Content	%	70 - 73	ISO 3251
Color	Gardner	Max 2	ASTM D 1544
Specific Gravity	relative	1.15-1.18	ISO 2811
Gel Time <sup>1</sup>	minute	14 - 19	ASTM D 2471

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

Gel Time Behavior of Resin<sup>2</sup>

Temperature (°C)	18	25	30
Gel Time (minute)	20-30	14-19	10-13

2) Gel time measuring formulation used: (Cobalt Octoate Farapol C 901 1%- 1.0 phr, Akperox A60 1.0 phr).



## T.0ypical Casted Resin Properties<sup>3</sup>

Property	Unit	Specification	Method
Tensile Strength	MPa	10-15	ISO 3268, ASTM D638, ISO 527-2&4
Elongation at Break	%	60-70	ISO 3268, ASTM D638, ISO 527-2&4
Tensile Modulus	GPa	NA	ISO 3268, ASTM D638, ISO 527-2&4
Flexural Strength	MPa	NA	ISO 178/ASTM D 790
Flexural Modulus	GPa	NA	ISO 178/ASTM D 790
Heat Distortion Temperature	<sup>0</sup> С	NA	ISO 75
Barcol Hardness	Barcol	NA	ASTM D 2583
Water Absorption	%	$\approx 0.50$	ISO 62- Test Method 3
Linear Shrinkage <sup>4</sup>	%	≈ 1.0	Internal method

- 3) Materials used for curing are: (Cobalt Octoate Farapol C 901 1%- 1.0 phr, Akperox A60 1.0 phr). Curing Time is 24 hrs at Room Temperature and 3 hrs at 80 °C.
- 4) This test is done on the linear sample with dimensions (1 cm  $\times$  1 cm  $\times$  100 cm).

## Handling, Storage and Stability

FARAPOL O 132 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 abovementioned conditions, the shelf life for FARAPOL O 132 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 132 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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