

Applications:

- Recommended for most commercial FRP fabrication processes: hand lay-up, spray-up, pultrusion and resin transfer molding.
- Suitable for such applications as high temperature chlorination or caustic scrubbing and storage, industrial waste treatment facilities and solvent/extraction processes used in mining.

Properties:

- Low color compared to typical vinyl ester resins
- Excellent corrosion and temperature performance (Resists organic solvents, acidic, alkaline, and oxidizing environments, and an extensive range of corrosive media over a wide temperature range)

Composition of The Resin:

Farapol Novolac-based Epoxy Vinyl Ester Resin designed to provide exceptional mechanical properties at higher temperatures. This resin offers a high resistance to solvents and chemicals, good retention of strength and toughness at elevated temperatures, and excellent resistance to acidic oxidizing environments.

Compatibility:

Avoid storing the resin along with Metallic Driers and Peroxides in the same area.

Safety:

Material Safety Datasheets of the product is available on demand.

Product Data¹:

| | |
|-------------------------------------|---------|
| ➤ Viscosity Brookfield (cps, @25°C) | 350-550 |
| ➤ Acid Value (mgrKOH/gr Resin) | 3-16 |
| ➤ Color(Gardner) | <2 |
| ➤ Specific Gravity | 1.1 |
| ➤ Solid Content(%) | 65±2 |
| ➤ Gel Time(minute, @25°C) | 20-30 |

Storage Conditions:

Farapol Novolac-based Epoxy Vinyl Ester Resin is a product sensitive to temperature, light & oxidation. Hence should be stored indoors in 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.

Stability:

On storage under above mentioned conditions, the stability for Farapol Novolac-based Epoxy Vinyl Ester is 6 months.

Supply Modes:

This Resin is Supplied in 200 Kg net. Steel Barrels and Bulk Road Tankers.

1 Gel Time, Acid Value, and Viscosity can be adjusted as per customer requirements.



Mechanical Properties of Clear Cured Castings:

| <i>PROPERTIES</i> | <i>TEST VALUE</i> | <i>METHOD</i> |
|----------------------------------|-------------------|---------------|
| Barcol Hardness | 48 | ASTM D2583 |
| Tensile Strength (MPa) | 80 | ISO 527-2 |
| Elongation at Break | 3.5 | ISO 527-2 |
| Heat Distortion Temperature (°C) | 140 | ISO 75-2 |
| Flexural Strength (MPa) | 140 | ISO 178 |
| Tg (°C) | 160 | ASTM D 3418 |

Materials used for curing are: (Cobalt Octoate Farapol C 901 1%- 1.0 phr, Dimethyl aniline 10 % 0.7 phr & Akperox A60 1.0phr). Curing time is 24 Hrs at room Temperature and 2 Hrs at 80C & 1 Hr in 120 C. HDT samples should be post-cured at 140 c for 2 Hrs.

Water Absorption & Linear Shrinkage:

| <i>PROPERTIES</i> | <i>TEST VALUE</i> | <i>METHOD</i> |
|----------------------|-------------------|-----------------------|
| Water Absorption (%) | 0.20 | ISO 62- Test Method-1 |
| Linear Shrinkage (%) | 2.0 | Internal Method |

This test is done on linear sample with dimensions (1 cm × 1 cm × 100 cm).

Note: The laboratory data and results presented herein were obtained through the use of specific methods mentioned and all necessary precautions, high quality lab reagents, and efficient equipment's by FARAPOL JAM CHEMICAL INDUSTRIES. FARAPOL does not guarantee duplication of such results by third parties.

Connect with us:

Tel: +98 21 88875228

Fax: +98 21 88673951

Site: www.farapol.com

Email: info@farapol.com

Pub. No: POL- F-76-33 rev. 02 Rev. Date: 11/07/2019

