

### Applications:

- General-purpose flame-retardant FRP applications
- Chemical plant and corrosion resistant structures (acid storage tanks, road transportation tankers, pipelines, scrubbers, Boat, etc.)
- Building construction and infrastructure (roofing sheets, doors, water tanks, partitions, domes, furniture)
- Marine vessels and structures

### Properties:

- Flame-retardant base polymer
- Corrosion resistant
- Excellent fiberglass wet out

### Composition of The Resin:

Farapol Flame Retardant Resin is ideal for a variety of general-purpose flame-retardant FRP applications. This resin has good compatibility with aluminum trihydrate ATH.

### 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 Data<sup>1</sup>:

➤ Viscosity Brookfield (cps, @25°C)	400-500
➤ Acid Value (mgrKOH/gr Resin)	<30
➤ Color(Gardner)	<2
➤ Specific Gravity	1.20 - 1.30
➤ Solid Content (%)	65±2
➤ Gel Time (minute, @25°C)	15-18

### Storage Conditions:

Farapol Flame Retardant 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 Flame Retardant Resin 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.*



**Category according Flame Test Result on Clear Cast Mold:**

Row	Test Method	Standard	Result- Class
1	Horizontal	UL 94/ ASTM D 635	Class-0
2	Vertical	UL 94/ ASTM D 5048	V-0
3	Limited Oxygen Index (LOI)	ASTM D 2863	27.1

Class-0 in Horizontal Category means did not ignite after removed flame source.

*Materials used for curing are: (Cobalt Octoate Farapol C 901 1%- 1.0 phr, Akperox A60 1.0phr). Curing time is 24 Hrs at room Temperature and 3 Hrs at 80°C.*

**Mechanical Properties of Clear Cured Castings:**

PROPERTIES	TEST VALUE	METHOD
Barcol Hardness	50	ASTM D2583
Tensile Strength (MPa)	40	ISO 527-2
Elongation at Break	1.0	ISO 527-2
Heat Distortion Temperature (°C)	98	ISO 75-2
Flexural Strength (MPa)	90	ISO 178

*Materials used for curing are: (Cobalt Octoate Farapol C 901 1%- 1.0 phr, Akperox A60 1.0phr). Curing time is 24 Hrs at room Temperature and 3 Hrs at 80°C.*

**Water Absorption & Linear Shrinkage:**

PROPERTIES	TEST VALUE	METHOD
Water Absorption (%)	0.14	ISO 62- Test Method-1
Linear Shrinkage (%)	≈ 1.6	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.

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