



TECHNICAL DATA SHEET

Doc. Ref: SPR-TDS-FRR · Rev. 01 · July 2026

FIRE RETARDANT RESIN

Halogenated Fire-Retardant Unsaturated Polyester Resin · UL 94 V0* · Low Smoke Emission

PRODUCT DESCRIPTION

Fire Retardant Resin is a specially formulated unsaturated polyester resin modified with halogenated fire-retardant additives to reduce flammability, limit smoke production and prevent flame spread. Rated to UL 94 V0*, it slows or prevents ignition and flame propagation and is engineered to reduce smoke density and toxic gas emissions, curing at room temperature into a rigid, heat-resistant polymer.

KEY FEATURES

- UL 94 V0 flammability rating*
- Halogenated fire-retardant formulation
- Reduced smoke density and toxic gas emission
- Room-temperature cure with MEKP catalyst
- Cures into a rigid, heat-resistant polymer

RECOMMENDED APPLICATIONS

- Automotive and railway components
- Marine and electrical applications
- FRP panels and building components
- Tunnels, infrastructure and fire-sensitive environments

TYPICAL TECHNICAL PROPERTIES

Base Resin	Unsaturated polyester
FR Type	Halogenated fire-retardant formulation
Flammability Rating	UL 94 V0 *
Physical Form	Liquid
Colour	White
Curing System	Room-temperature cure with MEKP catalyst
Smoke / Emission	Reduced smoke density and toxic gas emission
Viscosity	400 cPs
Gel Time	5.5 minutes
Styrene Content	35%
MEKP Dosage	MEKP 1.5% and Cobalt Octoate 0.4%
Specific Gravity / Density	Not Provided
Flash Point	Not Provided
Shelf Life	3 months
Storage Temperature	30–35 °C
Packaging	35 kg / 225 kg
Minimum Order Quantity	500 kg

Fields marked “Not Provided” are pending confirmation with technical staff and will be issued in a revised sheet. No value is estimated or assumed. *UL 94 V0 rating as published by the manufacturer; test report/certification reference to be supplied on request and confirmed in the next revision.

SAFETY & HANDLING

Follow standard industrial safety practices when handling this product, including appropriate personal protective equipment and adequate ventilation. Refer to the applicable Safety Data Sheet (SDS) where available.

Disclaimer: The information above is based on data published by the manufacturer at the time of issue and is believed accurate. Values shown are typical and are not to be interpreted as guaranteed specifications; properties may vary within normal manufacturing tolerances between batches. Users are responsible for determining suitability for their intended application and should confirm current specifications directly with Samrat Poly Resins prior to use.