



SAMRAT POLY RESINS

Manufacturer of Coating & Composite Resins · Doraha, Ludhiana, Punjab, India

TECHNICAL DATA SHEET

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PULTRUSION GRADE RESIN

SPR 401 PT · Terephthalic pultrusion grade — heat-activated peroxide cure, not ambient MEKP/cobalt

PRODUCT DESCRIPTION

SPR 401 PT is the high-strength terephthalic pultrusion grade of the SPR 401 family, with excellent mechanical properties per the catalogue, for continuous pultrusion processing and pultruded FRP profiles and structural sections. Production pultrusion uses a heat-activated peroxide system — not the ambient MEKP and cobalt system. It is supplied non-accelerated and non-thixotropic.

KEY FEATURES

- Terephthalic pultrusion grade (SPR 401 PT)
- High strength and excellent mechanical properties, per the catalogue
- Hot-die gel time 40–80 seconds at 130–140 °C
- Heat-activated peroxide production cure; 0% MEKP and 0% cobalt in production

LISTED APPLICATIONS

- Continuous pultrusion processing
- Pultruded FRP profiles and structural sections

TYPICAL SPECIFICATION

IDENTITY AND SUPPLY	
Catalogue Code	SPR 401 PT
Resin Chemistry	Terephthalic unsaturated polyester
Supply Condition	Non-accelerated · non-thixotropic
Colour / Appearance	Clear, light-straw to amber liquid
Manufactured At	Doraha, Ludhiana, Punjab, India
Packaging, MOQ and Shelf Life	Confirm with Samrat Poly Resins at the time of enquiry
TYPICAL LIQUID RESIN PROPERTIES	
Viscosity	300–600 cPs at 25 °C
Hot-Die Gel Time	40–80 seconds at 130–140 °C
Ambient QC Gel Time	15–25 minutes at 25 °C
Specific Gravity	1.10–1.14
Styrene Content	36–42% by weight
CURE SYSTEM	
Production Cure	Heat-activated peroxide blend, total dosage 1.0–2.0% — added separately during processing
Production MEKP	0%
Production Cobalt	0%

Values are typical values published by Samrat Poly Resins for this grade in the 2026 product catalogue. They describe the liquid resin at the stated reference condition and are not guaranteed limits or finished-component properties. Properties of a cured laminate, casting, compound or moulded part depend on the reinforcement, process and cure used, and must be established by the user.

GRADE SELECTION

SPR 401 PT is one grade in the Samrat Poly Resins range. Where the requirement is different from the applications listed above, these are the usual alternatives to review:

- Filament Winding Grade Resin (SPR 301 FW) — The isophthalic grade for filament-wound pipes and tanks.
- Vinyl Ester Resin (SPR 501 VE) — Where the profile faces corrosive service or the specification names vinyl ester.
- Terephthalic SMC Resin (SPR 401 SMC) — The terephthalic resin for compression-moulded SMC parts.

Share the finished part, the process and the service conditions with your enquiry so the right grade can be confirmed before a trial.

SAFETY & HANDLING

Handle with appropriate personal protective equipment and adequate ventilation. Unsaturated polyester resins contain styrene, which is flammable. Keep away from heat, sparks and open flame.

Never mix the peroxide catalyst directly with the cobalt accelerator. Add each separately into the resin — direct contact between the two can react violently.

Store the resin, initiators and accelerators separately, in original sealed containers, cool, shaded and away from heat and ignition sources. Request the current safety information for this grade from Samrat Poly Resins before handling.

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.