



FILAMENT WINDING GRADE RESIN

SPR 301 FW · Non-thixotropic isophthalic grade for filament winding

PRODUCT DESCRIPTION

SPR 301 FW is an isophthalic polyester grade from the SPR 301 family with high binding properties and high strength, per the catalogue, for the filament winding process — including filament-wound FRP pipes and tanks. It is supplied non-accelerated and non-thixotropic, with MEKP and cobalt octoate added separately during use.

KEY FEATURES

- Isophthalic filament-winding grade (SPR 301 FW)
- High binding properties and high strength, per the catalogue
- Typical viscosity 200–400 cPs; gel time 20–60+ minutes at 25 °C
- Supplied non-accelerated and non-thixotropic

LISTED APPLICATIONS

- Filament-winding processes
- Filament-wound FRP pipes and tanks

TYPICAL SPECIFICATION

IDENTITY AND SUPPLY	
Catalogue Code	SPR 301 FW
Resin Chemistry	Isophthalic unsaturated polyester
Supply Condition	Non-accelerated · non-thixotropic
Colour / Appearance	Clear, light-yellow 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	200–400 cPs at 25 °C
Gel Time	20–60+ minutes at 25 °C
Specific Gravity	1.04–1.14
Styrene Content	35–45% by weight
CURE SYSTEM	
Reference Cure System	MEKP 1.5% + Cobalt Octoate approximately 0.4% — added separately during use

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 301 FW 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:

- Vinyl Ester Resin (SPR 501 VE) — For filament-wound equipment in more corrosive service, or where vinyl ester is specified.
- Pultrusion Grade Resin (SPR 401 PT) — For continuous pultruded profiles cured in a heated die.
- ISO Polyester Resin (SPR 301) — The general isophthalic grade, with published cured-resin data.

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.