SAMRAT POLY RESINS

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

TECHNICAL DATA SHEET Doc. Ref: SPR-TDS-IDM · Rev. 01 · September 2026

ISOPHTHALIC DMC RESIN

SPR 301 DMC · Isophthalic dough moulding compound resin for hot-mould processing

PRODUCT DESCRIPTION

SPR 301 DMC is the isophthalic dough moulding compound resin of the SPR 301 family, for hot-mould DMC processing, listed for dough moulding compound production and compression-moulded composite components. The catalogue describes it as a separate manufactured product from the isophthalic SMC resin, sharing the same typical specification. It is supplied non-accelerated, with MEKP and cobalt octoate added separately during use.

KEY FEATURES

- Isophthalic resin for dough moulding compound (SPR 301 DMC)
- For hot-mould DMC processing
- A separate manufactured product from the SMC resin, per the catalogue
- Typical viscosity 800–1,400 cPs; gel time 12–18 minutes at 25 °C

LISTED APPLICATIONS

- Dough moulding compound production
- Compression-moulded composite components

TYPICAL SPECIFICATION

IDENTITY AND SUPPLY	
Catalogue Code	SPR 301 DMC (combined SMC / DMC entry)
Resin Chemistry	Isophthalic unsaturated polyester
Compound Type	Dough moulding compound (DMC)
Supply Condition	Non-accelerated
Colour / Appearance	Clear, pale-yellow to light-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	800–1,400 cPs at 25 °C
Gel Time	12–18 minutes at 25 °C
Specific Gravity	1.10–1.14
Styrene Content	31–36% by weight
CURE SYSTEM	
Reference Cure System	MEKP 1.5% + Cobalt Octoate 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 DMC 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:

- Isophthalic SMC Resin (SPR 301 SMC) — The isophthalic resin for sheet moulding compound.
- Terephthalic DMC Resin (SPR 401 DMC) — The terephthalic DMC resin, more viscous, with its own specification.
- DMC/SMC Resin (SPR 201 SMC · DMC) — The orthophthalic moulding-compound resin with a published TDS.

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.