



UV STABILIZED SHEET GRADE YELLOW RESIN

Pre-Pigmented Orthophthalic Unsaturated Polyester Resin · UV-Stabilised · Sheet and Panel Production

PRODUCT DESCRIPTION

UV Stabilized Sheet Grade Yellow Resin is a pre-pigmented unsaturated polyester resin manufactured by Samrat Poly Resins for FRP sheet and panel production where the finished part is exposed to sunlight. It is supplied as a yellow liquid with the pigment already dispersed at the factory, so colour does not have to be added on the shop floor, and it carries a UV-stabilised formulation intended to improve resistance to prolonged outdoor exposure and weathering. It is a distinct grade from the standard Sheet Grade Yellow Resin, which is supplied for general sheet and panel manufacturing without a UV-stabiliser package.

KEY FEATURES

- Pre-pigmented yellow resin — colour dispersed at the factory, not added at the laminating stage
- UV-stabilised formulation intended for prolonged outdoor exposure
- Formulated for FRP sheet moulding and lamination processes
- Orthophthalic unsaturated polyester base
- Room-temperature cure with MEKP catalyst and cobalt octoate accelerator

RECOMMENDED APPLICATIONS

- FRP sheet and panel production for outdoor service
- Coloured roofing and cladding sheet
- Sheet moulding and lamination
- Exterior-exposed coloured FRP components

PRODUCT SPECIFICATION

IDENTITY AND SUPPLY	
Resin Type	Orthophthalic Unsaturated Polyester Resin
Grade	UV Stabilized Sheet Grade Yellow Resin
Form	Pre-pigmented yellow liquid resin
Supplied Colour	Yellow — factory master yellow shade
Acceleration Status	Non-accelerated
Packaging	225 kg industrial drum
Country of Origin	India
LIQUID RESIN PROPERTIES	
Viscosity	280 cPs at 25 °C
Gel Time	6.5 minutes at 25 °C
Specific Gravity	1.10 g/cm ³ at 25 °C
Styrene Content	35% by weight
CURE SYSTEM	
Curing System	MEKP catalyst with cobalt octoate accelerator
Recommended Catalyst Dosage	MEKP 1.5% by weight of resin
Recommended Accelerator Dosage	Cobalt octoate 0.4% by weight of resin
UV STABILISATION	
Stabiliser System	UV absorber with HALS light stabiliser
UV Absorber Type	Benzotriazole type
HALS	Hindered amine light stabiliser
Cure Mechanism	UV-stabilised; not UV-light-curing
WEATHERING PERFORMANCE	
Test Method	ISO 4892-2 xenon arc; ASTM G155 named as the alternative method
Exposure Duration	1,000 hours
Colour Change	ΔE 3–5
Gloss Retention	80%
Tensile Strength Retention	85%
SAFETY AND STORAGE	
Flash Point	32 °C, closed cup
Shelf Life	2 months

Storage Temperature

15–25 °C, maximum recommended 25 °C

Storage Conditions

Original tightly closed containers in a cool, dry, shaded, well-ventilated area. Protect from direct sunlight, UV exposure, heat, sparks, ignition sources and moisture.

Values are typical values supplied by Samrat Poly Resins for this grade and are not guaranteed limits. This grade is UV-stabilised: it cures with MEKP catalyst and cobalt octoate accelerator and is not a UV-light-curing resin.

GRADE SELECTION

Where the finished sheet is translucent and optical clarity matters rather than colour, Roof Light Sheet Grade Resin is the grade to review. For general interior sheet and panel manufacturing without outdoor exposure, Sheet Grade Yellow Resin is the standard route. Confirm the intended sheet product, exposure condition and processing route before selecting a grade.

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 MEKP catalyst directly with the cobalt accelerator. Add each separately into the resin — direct contact between the two can react violently.** Refer to the applicable Safety Data Sheet (SDS) 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.