



RUSTIN RESIN

PRODUCT DATA SHEET

RS-1000-GENERAL PURPOSE ROOFLIGHT RESIN WITH UV STABILIZATION

Applications:

This resin is especially designed for the manufacture of roofing sheets.

Properties:

Low viscosity and Medium Reactivity

Excellent clarity and transparency.

Matching refractive index that of glass mat to retain light transmittance in fiber glass reinforced sheet. .

Composition of the Resin:

RS-1000 is General purpose unsaturated Polyester resin having low viscosity and medium reactivity based on Orthophthalic acid and standard glycols, dissolved in styrene monomer. It is specially designed for the manufacture of roofing sheets. The sheets made with this resin and powder bonded mat show excellent clarity and transparency. In order to prevent the polymer degradation by UV radiation suitable and optimized quantities of UV stabilizers are added in this resin.

Compatibility:

Avoid storing the resin along with Metallic Driers, Peroxides and catalyst in the same area.

Safety:

Material Safety Datasheets of the product is available on demand.

Product Data:

PARAMETERS	UNIT	SPECIFICATION
Appearance		Clear Transparent Liquid
Color (Gardner)		≤1
Viscosity Brookfield, @25°C LV# 2,30 RPM	Cps	200± 25
Acid Value	Mg.KOH/gm	25±3
Specific Gravity @25°C	Gm/ml	1.11±0.02
Volatile Content	%	36±3
Gel Time @25°C	Min	10-15
Peak Temperature	°C	170-180

☐ Gel Time with 1.0ml Cobalt Octate (Metal content 3%) and 1.5ml MEKP (Active Oxygen 9 ± 0.2)

Storage Conditions:

RS-1000 should be stored in a cool and dry place away from sunlight and other sources of heat, preferably below 25°C. At higher storage temperatures, the shelf life decreases sharply. Presence of moisture also affects the storage life of the resin leads to turbidity in the resin.

Stability:

On storage under above mentioned conditions, the stability for **RS-1000** is guaranteed for 3 months

Supply Modes:

Resin is supplied in 200kg Steel Drums.

Food and Drug:

All resins in this datasheet are manufactured from raw materials that are listed in FDA regulation Title 21 CFR 177.2420.

Mechanical Properties of Clear Cured Castings:

PROPERTIES	TEST VALUE	METHOD
Barcol Hardness	42	ASTM D 2583
Tensile Strength (MPa)	50	ISO 527-2
Flexural Strength (MPa)	100	ISO 178
Elongation at Break (%)	3	ISO 527-2
Heat Distortion Temperature (°C)	62	ISO 75-2
Water Absorption @25°C(after 24 Hrs.) mg	22	ISO 62

Curing Conditions:

The specimens for testing of mechanical properties are prepared by curing the resins with 0.5 ml Accelerator (3% cobalt content) and 1.0 % MEKP catalyst, added to 100 gm. of resin. The specimens are cured for 24 hours at room temperature followed by post curing for 4 hours at 80°C.

Disclaimer: Although the facts and suggestions in this data sheet are based on our own research and are believed to be reliable, we cannot assume any responsibility for performance or results obtained through the use of our product described herein in view of the many factors that may affect processing and application.

RUSTIN RESIN does not guarantee duplication of such results by third parties.

Method of Testing:

The method of testing and the tolerances are as prescribed in ISO, ASTM and BS where is not available.

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**** Gel time, Acid value and viscosity can be adjusted as per customer requirements.**