



**RUSTIN RESIN**

## **PRODUCT DATA SHEE**

### **RS-2550- ISOPHTHALIC SMC/BMC RESIN**

#### ***Applications:***

This resin is specially designed for the manufacture of fast line speed SMC/BMC.

#### **Properties:**

Medium viscosity and high reactive.

To accept filler loading and excellent impregnation of glass fiber's during manufacturing.

Highheat distortion temperature.

Good mechanical and electrical properties.

#### **Composition of the Resin:**

**RS-2550** is unsaturated Polyester resin having medium viscosity and high reactivity based on isophthalic acid and standard glycols, dissolved in styrene monomer. It is designed especially for SMC/DMC applications.

#### **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:**

<b>PARAMETERS</b>	<b>UNIT</b>	<b>SPECIFICATION</b>
appearances		Clear pale liquid
Color		≤1
Viscosity Brookfield, @25°C LV#2,20RPM	Cps	1100 ± 50
Acid Value	Mg.KOH/gm	15 ± 3
Specific Gravity @25 <sup>0</sup> C	Gm/ml	1.11±0.02
Volatile content	%	36±3
Gel Time @25°C	Min	15-20 min
Peak Temperature	°C	190

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

**Storage Conditions:**

RS-2550 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-2550 is guaranteed for 3 months

**Supply Modes:**

Resin is supplied in 200 kg 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	50	ASTM D 2583
Tensile Strength (MPa)	55	ISO 527-2
Flexural Strength (MPa)	125	ISO 178
Elongation at Break (%)	3	ISO 527-2
Heat Distortion Temperature (°C)	125	ISO 75-2
Water Absorption @25°C(after 24 Hrs.) mg	25	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.

**Contact us:**

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