



Technical Data Sheet:

Paya-63

Product Name and Identification:

- Product Name: **Paya-63**
- Chemical name: **Orthophthalic Unsaturated Polyester Resin**

Product Description:

This high-quality resin, known for its exceptional mechanical and chemical properties, offers a reliable solution for a wide range of molding applications. Paya-63 exhibits excellent strength, making it suitable for parts that require robust performance and durability. With its optimal viscosity, this resin ensures easy handling and processing during molding operations. Whether producing intricate components or larger structural parts, Paya-63 delivers exceptional dimensional stability and reliable performance.

Physical and Chemical Properties:

- 1. Viscosity:** 900-1200 mPa.s
- 2. Percent Solids:** 64-67 %
- 3. Density at 20 °C:** 1.05-1.13 g/cm³
- 4. Acid Value (Solids):** <20 mg KOH/g
- 5. Color (gardener):** <2
- 6. Gel Time:** 2-5 minute
- 7. Time to Peak:** 5-7 minute
- 8. Peak Temperature:** 140-160 °C

Technical Performance:

Parameter	Result	Units	Test Method
Hardness (Barcol):	40 - 45	-	ASTM D2583
Tensile Strength:	80 - 90	Mpa	ISO 527-2
Elongation at Break:	3 - 4	%	ISO 527-2
Flexural Strength:	110 - 140	Mpa	ISO 178
Flexural Modulus:	3000 - 3700	Mpa	ISO 178
Heat Distortion Temperature:	80 - 90	°C	ISO 75-2
Water Absorption, 24 hrs.:	≤ 0.30	%	ISO 621958
Volumetric curing shrinkage:	8.82	%	DIN-16945

Application and Use:

SMC, BMC Applications

Car Parts

SMC Sheets

Curing Conditions: For every 100 gr of resin add 1 gr of hardener (TBPB). In the range of 85-95°C the curing rate is not very high, unless there is a reaction exotherm. Really short cure times can be achieved only above 120°C. The optimum temperature range for hot press molding therefore is 130-140°C.

Packaging and Shelf Life:

Packaging Options: Paya-63 is conveniently packaged in robust 200 kg metal barrels.

Shelf Life: Under optimal storage conditions, Paya-63 exhibits a shelf life of 6 months.

