

Unsaturated Polyester Resin

USP-2021N



Product Description

Unsaturated polyester resin based on **Ortophtalic**

Features

Good mechanical & chemical properties
Excellent adhesion to glass fibers

Application

Manufacturing tanks and reservoirs	Manufacturing pipes
Casting decorative & industrial parts and accessories	Gel coat

Typical Properties of Liquid Resin

Styrene content (%)	34-36	ASTM D1259-06
Viscosity (mPas)	400-600	ASTM D2196
Acid value (mg KOH/g)	Max. 30	ASTM D1639-90
Color (Gardner)	Max.3	ASTM D1544-04
Density @ 25°C (g/cm ³)	1.10	ASTM D1298
Stability @ 25°C	6 months	

Curing Properties

100 g resin + 0.1 g Co 10% + 1.5 g MEKP 50% @	25°C:	
Gel time	10-15 min	ASTM D2471
Peak Temperature	160-190 °C	"

Physical Properties of Cured Resin

Tensile Strength (MPa)	Min. 70	ASTM D790
Tensile Modulus (MPa)	1000	ASTM D790
Flexural Strength (MPa)	Min. 135	ASTM D790
Flexural Modulus (MPa)	2500	ASTM D790
HDT (°C)	80±5	ASTM D648
Water Absorption (%)	Max. 0.2%	ASTM D570
Hardness (Barcole)	Min. 45	ASTM D2583

Package & Storage details

Package Capacities	200 kg drum
Shelf Life	6 months
Storing Area Conditions	The product should be kept in dry and cool condition away from sources of heat, spark and ignition. The product should not be unsealed unless for consumption.

Remark

Never mix peroxide and accelerator.

Health and safety

Avoid skin and eye contact by wearing overalls, gloves, goggles and mask
Use the resin under well ventilated condition

SHIMI POLYMER TABAN Company
Tel: 028-33297492-5, Fax: 028-33297491
Production: Alborz Industry State, Qazvin