

Terephthalic Based Unsaturated Polyester Resin

Polyseal -202

General Information

POLYSEAL -202 is a non-thixotropic , non-accelerated terephthalic acid based polyester resin suitable for wide range of applications like fabrication of FRP structures. The product is designed to perform optimum combination of performance and economy.

Typical Liquid Resin

Properties

Properties	Specified Range	Unit
Acid Value	14 - 20	mg KOH/gm of
		Resin
Viscosity @ 25°C	$450\pm20\%$	cps
Brookfield Viscometer		
RVDV1-M, Spindle 2,		
RPM- 20.		
Monomer Content	38 ± 2	%
Gel Time @ 25°C	12 ± 2	Min
With 1% of 3% Cobalt Octoate		
Solution		
1.5% of 50% Solution of MEKP		
Peak Exotherm	185-205	°C
Temperature		

Properties are tested according to the method described in IS 6746-1994.

<u>All the 'Physical Parameters' can be tailored for suitability of</u> customer's specific end application.

Strongbonds Polyseal Pvt. Ltd. An ISO 9001 : 2015 Company CIN No: U51909WB1990PTC049585 Website: www.strongbondspolyseal.com P-26 C ; Block – D ; Kalyani Industrial Estate Nadia:741235 ; West Bengal ; India Tel : 033 2582 3061 Email: <u>strongbondpolyseal@gmail.com</u> City Office:

CD- 82, Salt Lake City, Sector-I, Kolkata- 700064 Tel : 033 2334-8136



Technical Datasheet

Mechanical Properties of Cast Resin

Properties	Unit	Nominal Values	Test Method
Tensile Strength	MPa	70	ISO 527-4
Tensile Modulus	MPa	3600	ISO 527-4
Elongation at break	%	4-5	-
Flexural Strength	MPa	108	ISO 178
Flexural Modulas	MPa	3700	ISO 178
Heat Deflection Temp.	°C	95	ISO 75
Barcol Hardness	Barcol	40	ASTM D2583

(Cured for 24 hours at room temperature followed by 12 hrs at 65°C)

Features and Applications

Its lower range of acid value indicates high molecular weighted resin that will form giant cross-linked structure with styrene in cured state which in turn provides more toughness & mechanical strength than normal orthophthalic resin.

It's workable Viscosity range is suitable for hand lay-up, spray-up, cold press, etc.

Peak exotherm temperature measures the high reactivity of the resin. Higher the peak temp, faster will be the curing process.

Polyseal- 202 can resists acid corrosive effect of mineral acids of pH range 4-9; neutral & mildly acidic salts & chemicals with mild corrosive properties.

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Approvals & Certificates	The manufacturing , quality control and distribution of the product by Strongbonds Polyseal Pvt. Ltd. are complying with ISO 9001: 2015 standard.
Storage & Handling	Like other polyester resins Polyseal -202 is sensitive to temperature , moisture and Sun light . Hence resin containers should be stored at dry places in closed-sealed condition bellow 25°C to ensure optimum resin properties. Prolong exposure to open environment can affect liquid resin properties like viscosity and gel time.
Shelf Life	All the unsaturated polyester resins are of limited shelf life. Under above mentioned conditions the shelf life of the material is 90days (3 months). Storage at higher temperature will adversely affect resin properties and shelf life.
Packaging	Polyseal – 202 is supplied in 25 kg and 35 kg Jarricanes and M.S. Drums containing 225.0 Kg of resin.
Safety Information	Skin contact and vapour inhalation should be avoided during working due to presence of styrene monomer. Wear breathing mask, safety goggles, gloves and protective clothing while working. Please consult Material Safety Datasheet prior to working.

Revision Date: 08.10.2018

N.B. : All the above information is based on the results of tests carried out at our laboratory. All the information indicates general characteristics of the product.

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