

PRODUCT CODES: C220010, C220012, C220014, C220016

Polyplex Isophthalic Laminating Resins are thixotropic, un-waxed, pre-promoted isophthalic unsaturated polyester laminating resins which are specifically designed for high performance composites including marine, transport and potable water applications. These resins are suitable for both hand lay-up and spray applications, and show excellent glass fibre wetting properties, excellent sprayability and reduced tendency towards shrinkage problems such as pre-release.

FEATURES

- Low viscosity under high shear with high thixotropy
- Colour change mechanism
- Long Geltime versions available
- Excellent adhesion

BENEFITS

- Excellent sprayability. Rapid glass wet-out with minimal drainage on inclined surfaces
- Indicates presence of initiator
- Allows extended working times for large laminate surface areas. Suitable for use in warm workshop conditions
- Provide excellent inter-laminar adhesion

SUGGESTED USES

Product can be used for all general purpose fabrications requiring Isophthalic based resin.

RELATED PRODUCTS

- C220011: POLYPLEX ISOPHTHALIC LSE RESIN 15
 C220013: POLYPLEX ISOPHTHALIC LSE RESIN 30
 C220015: POLYPLEX ISOPHTHALIC LSE RESIN 45

The number at the end of the product name indicates the gel time of that particular resin when catalysed as recommended @ 25°C.

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Appearance	Blue Opaque Liquid	Visual
Viscosity	1500 - 2000 cP	Brookfield #2/12 @ 25°C
Gel Time (minutes)	10 – 15 (C220010) 25 – 30 (C220012) 40 – 45 (C220014) 55 – 60 (C220016)	Using 1% M200
Density	1.10 g/cm ³	@25°C
Flash Point	31°C	Setaflash
Shelf Life	6 Months	When stored in original closed container in the shade

Typical values: Based on materials tested in our laboratories, but varies from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

RECOMMENDED CATALYSTS

Curox M200 or Butanox M50 MEKP

TYPICAL CAST UNFILLED RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Density	1.19 g/cm ³	ISO R1183
Tensile Strength	65 MPa	ISO R527
Tensile Elongation	2.0 %	ISO R527
Flexural Strength	125 MPa	ISO 178
Flexural Modulus	4000 MPa	ISO 178
Volume Shrinkage	7-8 %	ISO 3521
Heat Distortion Temperature	95°C	ISO 75

Cast resin was prepared as laid down in BS 3532 using 1% MEKP. Cured at room temperature for sixteen hours then post cured for two hours at 80°C followed by two hours at 100°C.

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum resin handling properties, polyester resins should be stored in closed containers, away from heat sources and sunlight. The resin should be stored away from all sources of ignition. Stored resin quantities should be kept to a reasonable minimum and used on a first in/first out stock rotation basis.

Prolonged storage, or unfavourable storing conditions, may cause separation, therefore agitation of the resin before use is recommended.

STANDARD PACKAGING

Mild steel drums (225kg)
 Always refer to the MSDS before use