

PRODUCT CODE: C200308

POLYPLEX GREY WXD LAMINATING RESIN is a medium reactivity, rigid orthophthalic polyester resin with excellent application properties. POLYPLEX GREY WXD LAMINATING RESIN is thixotropic and pre-promoted and is designed for hand lay-up and spray-up application. The resin is pigmented grey, and contains a paraffin wax which gives the cured laminate a tack-free surface.

FEATURES

- Positive cure characteristics
- Low viscosity under high shear with high thixotropy
- Meets the requirements of AS4020 standard for items in contact with potable water*
- Contains grey pigment

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

BENEFITS

- Suitable for general laminating.
- Excellent sprayability, with minimal drainage on inclined surfaces.
- Suitable for the manufacture of FRP vessels to contain potable water.
- Suitable for applications where opaque laminates are required.

ADDITIONAL INFORMATION

When a laminate is built up in stages with intermediate curing, surfaces must be abraded if further laminates are to be applied.

*A laminated test panel made from Polyplex C200307 passed the non-metallic requirements of AS/NZS 4020-2002 – which defines a method for “Testing of products for use in contact with drinking water.”

A laminated panel – representative of the specific article, or final moulded product, should be tested and qualified according to AS4020 in order to confirm compliance and suitability for Potable Water service applications. The test results obtained related to the specific panel sample tested, and are only intended to demonstrate the capability of C200307 to comply with this standard, and the general suitability of C200307 for composite tanks to contain potable water.

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE
Appearance	Opaque grey liquid
Viscosity	
Brookfield LVT sp.2/12 rpm	1500 – 200 cP
Cone and Plate	250 – 300 cP
Geltime (1% MEKP Interox NR20)	
C200307 (Winter)	15 – 20 minutes
C200308 (Summer)	25 – 40 minutes
Density	1.10 gcm ⁻³
Flash Point (Setaflash)	31°C
Shelf Life (when stored in original closed container, in the shade)	6 months

Typical values: Based on materials tested in our laboratories, but varies from sample to sample.

TYPICAL MECHANICAL PROPERTIES IN CURED STATE (FULLY POSTCURED CASTING)

PROPERTY	TYPICAL VALUE	TEST DETAILS
Density	1.19 gcm ⁻³	ISO/R 1183-1970
Tensile Strength	60 MPa	ISO/R 527-1966
Tensile Elongation	2.0%	ISO/R 527-1966
Flexural Strength	100 MPa	ISO 178-1975
Flexural Modulus	4000 MPa	ISO 178-1975
Volume Shrinkage	7-8%	ISO 3521-1976
Heat Distortion Temperature	70-75C	ISO 75-1974
Barcol 934-1 Hardness	45	Barcol Impressor

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.