

PRODUCT CODE: C200342

POLYPLEX FR INFUSION RESIN 20 is a general purpose, self-extinguishing, unsaturated polyester resin. It is intended for production of mouldings requiring reduced flammability. The resin is non-thixotropic and pre-promoted and is suitable for use in Vacuum infusion moulding applications.

FEATURES

- Low viscosity.
- Mouldings have reduced flammability compared with products made from general purpose resins.
- Long green trim time, low exotherm.

BENEFITS

- Excellent flow and glass wet-out properties.
- Can be used in specialised application areas where materials must meet standard fire test requirements
- Ideal for large structures or thick laminates.

ADDITIONAL INFORMATION

Laboratory prepared, post cured CSM reinforced laminates made from C200342, have shown the following flammability results when tested in accordance with the following referenced Standards:

1. Rated Self extinguishing when tested according to ASTM D635. Classification: HB.
2. BS 476 Part 7: 1997 - Class 3

These results are provided as indications of the typical flammability properties achievable for Glass reinforced laminates based on Polyplex FR Infusion resin – C200342. As for all fire retardant Composite parts, the flammability properties of laminate constructions fabricated using C200342 must be qualified and verified by independent fire testing to confirm suitability for the application and compliance with any specifications and standards that need to be met. Flammability properties of laminates are not only dependent on the resin used in the construction. The flammability properties of the cured laminate will also be influenced by other factors including glass content & type, laminate construction or design, and the state of cure of the laminated panel.

TYPICAL PROPERTIES IN LIQUID STATE @ 25°C

PROPERTY	TYPICAL VALUE
Viscosity Brookfield LVT sp.2/60 rpm	190 - 230 cP
Density	1.10 gcm ⁻³
Appearance	Transparent Blue liquid
Flash Point (Setaflash)	31°C
Gel Time (1.5% MEKP Butanox M50):	19 - 21 minutes
Shelf life (when stored in original closed container, in the shade)	3 months

TYPICAL MECHANICAL PROPERTIES IN CURED STATE (FULLY POSTCURED CASTING)

		TEST METHOD
Tensile Strength	46 MPa	ISO 527-2
Tensile Modulus	3270 MPa	ISO 527-2
Tensile Elongation at Break	3.75%	ISO 527-2
Barcol 934-1 Hardness	40	Barcol Impressor

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)

Refer to MSDS before use