

POLYPLEX GP WHITE LSE RESINS are manufactured using a medium reactivity, rigid orthophthalic polyester with excellent application properties. These resins are thixotropic, pre-promoted and are designed for hand lay-up and spray-up application with minimal drainage on inclined surfaces. They show excellent glass fibre wet out and show positive curing properties while maintaining a relatively wide green time window, and low exotherm in thick laminate sections.

VARIANTS

CODE	DESCRIPTION	GEL TIME
C200026	POLYPLEX GP WHITE LSE RESIN 30'	30 Minutes
C200027	POLYPLEX GP WHITE LSE RESIN 45'	45 Minutes
C200029	POLYPLEX GP WHITE LSE RESIN 60'	60 Minutes
C200072	POLYPLEX GP WHITE LSE RESIN 75'	75 minutes
C200136	POLYPLEX GP WHITE LSE RESIN 90'	90 minutes

Based on 100 grams resin and 1ml MEKP NR20 @ 25°C

These resins contain ingredients which reduce styrene emission during application and give the cured laminate a tack-free surface. Low styrene emission resins alone will not enable the user to comply with the recommended atmospheric styrene levels, but with appropriate ventilation, these resins may assist in reducing the level of styrene in the workshop to which workers are exposed.

Tests carried to TP 261.2 (Inter-laminar adhesion) show no loss in adhesion after a delay of 24 hours between layers. When a laminate is built up in stages with intermediate curing and the delay between subsequent layers is more than 24 hours then the surface must be abraded before applying further laminates to ensure good adhesion between the layers.

TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE
Appearance	Opaque White
Brookfield LVT2/12 Viscosity @25°C	1600cP – 2000cP
Cone and Plate viscosity @23°C	200cP – 250cP
Density	1.10 g/m ³
Flash Point (Setaflash)	31°C
Volatile Content, %	41-44
Styrene Emission, g/m ² (LSE Versions only)	<20
Stability without initiator	6 months

TYPICAL CAST UNFILLED RESIN PROPERTIES (Fully Postcured)

Test	Result	Test Method
Barcol Hardness (GYZ 934-1)	40	EN 59
Density	1.19 g/cm ³	ISO R1183
Volume Shrinkage	7.5%	ISO 3521
Tensile strength, MPa	56	ISO R527
Tensile strength after immersion in boiling water for two hours MPa	43	ISO R527
Flexural strength, MPa	78	ISO 178
Flexural strength after immersion in boiling water for two hours, MPa	70	ISO 178
Tensile Modulus, GPa	4	ISO R527
Tensile modulus after immersion in boiling water for two hours GPa	3	ISO R527
Flexural modulus, GPa	4	ISO 178
Flexural modulus after immersion in boiling water for two hours, GPa	3	ISO 178
Elongation at break %	2	ISO R527
Heat deflection temperature (1.8MPa), °C	60-65°C	ISO 75

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 and in these situations agitation of the resin before use is recommended.

STANDARD PACKAGING

Mild steel drums (225kg)

Always refer to the MSDS before use.