

# POLYPLEX HI-LITE SURFBOARD LAMINATING RESIN



Technical Datasheet

PRODUCT CODE: C200062

POLYPLEX HI-LITE SURFBOARD LAMINATING RESIN is a medium reactivity, orthophthalic based unsaturated polyester resin, designed for use in FRP Surfboard constructions.

POLYPLEX HI-LITE SURFBOARD LAMINATING RESIN has been specially formulated to provide rapid glass fibre wetting properties, low colour and rapid cure rates following gelation. The resin is non thixotropic, UV stabilised and pre-promoted for ambient temperature curing using MEKP catalyst.

POLYPLEX HI-LITE SURFBOARD LAMINATING RESIN has been specially designed to make the surfboard appear brighter upon cure.

## FEATURES

- Fast gel and cure properties
- Specially formulated cure system

## BENEFITS

- Short moulding cycle times, rapid turnover
- Low colour, excellent clarity in cured laminates

## TYPICAL LIQUID RESIN PROPERTIES

PROPERTY	TYPICAL VALUE
Viscosity – Brookfield RVT 3/100	550 - 700 cP
Density	1.10 gcm <sup>-3</sup>
Styrene Content	37 – 40 %
Appearance	Clear blue
Flash Point (Setaflash)	31° C
Gel Time – (1.5% MEKP NR20)	4 - 6 minutes
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 values should not be construed as a guaranteed analysis of any specific lot or as specification items.

## TYPICAL CAST UNFILLED RESIN PROPERTIES

PROPERTY	TYPICAL VALUE	TEST DETAILS
Hardness	30 - 40	Barcol (GYZ 934-1) EN 59
Density	1.19 gcm <sup>-3</sup>	ISO R1183
Volume Shrinkage	7-8 %	ISO 3521
Tensile Strength	69 MPa	ISO R527
Flexural Strength	89 MPa	ISO 178
Flexural Modulus	3800 MPa	ISO 178
Elongation at break	2.0 – 2.5%	ISO R527
Heat Distortion Temperature	65 - 70°C	ISO 178 (1.8 MPa)

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.

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## 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.

## STANDARD PACKAGING

Mild steel drums (open head)  
Mild steel pails

Refer to Material Safety Data Sheet before use