



ABN 98 000 869 367

563 Willoughby Rd. Willoughby 2068 Ph (02) 9958 5238 Fax (02) 9958 0838

2 Lincoln St. Minto 2566 Ph (02) 9820 1144 Fax (02) 9603 2314

188 Manns Road, West Gosford NSW 2250 Ph (02) 4322 0255 (02) 4322 0255

Unit 1 19 Boden Road Seven Hills NSW 2147 Ph (02) 9674 7333 Fax (02) 9674 7377

TECHNICAL DATA SHEET

POLYESTER LAMINATING RESIN

PRODUCT CODE: 268BQTN LSE (Waxed) and 268BQTN (Unwaxed)

PRODUCT INFORMATION:

SHCP 268 is a thixotropic, quick-curing unsaturated polyester resin of orthophthalic grade for general laminating purposes. It is pre-accelerated, and suitable for both hand lay-up and gun spray-up. It is available in Australia either as 268BQTN LSE waxed, or 268BQTN unwaxed.

This resin is used for making a variety of glass fibre reinforced plastic products such as boats and canoes, bus shelters, telephone booths, stadium seating, bath tubs, water and storage tanks, cooling towers, plant and flowers pots, bath units, models, containers, dust bins, safety helmets, water and oil pipes, ash trays, septic tanks, car body parts, sporting equipment, concrete framings, chairs and tables, and other household as well as industrial articles. Glass reinforced laminates made with this resin possess excellent mechanical strength along with good rigidity and outstanding durability. The SHCP 268BQT resin and its variants are approved by Lloyd's Register of Shipping for boat construction.

SPECIFICATIONS:

Appearance:	Opaque, blue colour change resin solution.
Viscosity at 30°C:	4-5
Thixotropic Index:	2.80 - 3.50
Accelerator (6% Cobalt content):	0.5%
Gel Time, 100gm. mass @ 30°C., 1% MEKP Butanox M50:	15 - 18 minutes
Cure Time at 30°C:	30 - 35 minutes
Typical Peak Exotherm 100gm. sample @ 1% w/v MEKP:	130 -140°C.
Stability in the dark below 25°C:	6 months in sealed container.

PROPERTIES:

Water Absorption (7 day value):	0.35% (Test Method ISO-62-1980)
Barcol Hardness:	48 (Test Method ASTM D2583-67)
Heat Distortion Temperature:	67.3°C (Test Method ASTM D648-72)
Elongation at Break:	3.2% (Test Method ASTM D638-72)
S.G. liquid resin @ 25°C:	1.13kg/litre (Test Method ASTM D1475)
Volume Shrinkage on Cure:	9% (Test Method Specific Gravity)
Volatile Content:	35.6% (Test Method ASTM D3030)
Flexural Strength:	8.4 Kgf/mm ² (Test Method ASTM D790)
Flexural Modulus:	536.1 Kgf/mm ² (Test Method ASTM D790)
Tensile Strength:	3 Kgf/mm ² (Test Method ASTM D638)
Impact Strength:	3.9 Kgf-cm/cm (Test Method ASTM D256)

Mat laminates (34.4% glass content) cured with 268BQT polyester resin have 0.192% water absorption for 24 hours and 0.28% for 7 days according to ISO-62-1980 Test Method and exhibit the following physical properties:

<u>DRY LAMINATES</u>	<u>WET LAMINATES</u>	<u>TEST METHOD</u>	
Flexural Strength:	190.3 MPa	214.3 MPa	ASTM D790 - 71
Flexural Modulus:	8.7 GPa	7.07 GPa	ASTM D790 - 71
Tensile Strength:	130.4 MPa	154 MPa	ISO 3268 - 1978
Tensile Modulus:	11.77 GPa	9.88 GPa	ASTM D638 - 72

HAZARD CLASSIFICATION:

Chemical Composition:	A solution of unsaturated polyester resin in styrene monomer.
Class:	3.2 Flammable Liquid HFP.
Label:	3.
Pack Code:	II
UN Number:	1866
Hazchem Code:	3 [Y]
NFPA Code:	Health 2, Flammability 3, Reactivity 2. (0= Low Hazard 4= High Hazard)

WARRANTY:

Singapore Highpolymer Chemicals Pty. Ltd. and Fiberglass (A/Asia) Sales Pty. Ltd. warrants that this product conforms to the product description contained herein. No other guarantee or warranty is expressed or implied, including warranties of merchantability or fitness for a particular purpose. Singapore Highpolymer Chemicals Pty. Ltd. and Fiberglass (A/Asia) Sales Pty. Ltd. shall not be liable for incidental, consequential, or other damages resulting from user negligence, breach of warranty, or any other theory arising out of the use or handling of this product.

End users are at all times encouraged to first conduct their own tests on the product to verify its suitability for their intended use.