

# PRODUCT BULLETIN

May 2006

### **NORPOL GS**

#### DESCRIPTION

NORPOL GS is a gelcoat based on iso-modified polyester resin.

NORPOL GS meets the most stringent requirements for working properties and is formulated to give glassfibre-reinforced polyester resin products good weather and water resistant surface protection. NORPOL GS is approved for use in boat production by Det norske Veritas and Lloyds Register of Shipping.

Recommended peroxide dosage: 1.3 - 2.0 %. Recommended film thickness: 0.55-0.85 mm (wet film)

#### **TYPICAL PROPERTIES**

#### PHYSICAL DATA IN LIQUID STATE AT 23°C

Properties	Unit	Spray quality	Hand quality	Test method
Viscosity				
- Brookfield RVF sp.4/4 rpm	mPa <sup>·</sup> s(cP)	9000-15000	14000-20000	A050
- Cone & Plate	mPas(cP)	220-300	750-900	A010
Density	g/cm³	1.1-1.3	1.1-1.3	B020
Flash point	°C	32	32	ASTM D 3278-95
Gel time: 1.5% NORPOL PEROXIDE 1	minutes	8-20	10-25	G020
Storage stability from date of production	months	6	6	G180

#### MECHANICAL/PHYSICAL DATA FOR THE GELCOAT'S BASE POLYESTER RESIN IN CURED STATE

Properties	Unit	Value	Test method
Tensile strength	MPa	min. 60	ISO 527-1993
Tensile modulus	MPa	min. 3500	ISO 527-1993
Tensile elongation	%	min. 2.5	ISO 527-1993
Heat distortion temp.	°C	min. 80	ISO 75-1993
Hardness Barcol	-	min. 40	ASTM D 2583-99
Water absorption	mg/testpiece	max. 80	Det norske Veritas 1981

The information herein is general information designed to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to contents and suitability for their specific applications. We warrant that our products will meet our written specifications. Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness for a particular purpose, nor is any protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is limited to replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

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# REICHHOLD

### STORAGE

To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 24°C/75°F and away from heat ignition sources and sunlight. Resin should be warmed to at least 18°C/65°F prior to use in order to assure proper curing and handling. All storage areas and containers should conform to local fire and building codes. Copper or copper containing alloys should be avoided as containers. Store separate from oxidizing materials, peroxides and metal salts. Keep containers closed when not in use. Inventory levels should be kept to a reasonable minimum with first-in, first-out stock rotation.

Additional information on handling and storing unsaturated polyesters is available in Reichhold's application bulletin "Bulk Storage and Handling of Unsaturated Polyester Resins." For information on other Reichhold resins or initiators, contact your sales representative or authorized Reichhold distributor.

#### SAFETY

#### READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET BEFORE WORKING WITH THIS PRODUCT

Obtain a copy of the material safety data sheet on this product prior to use. Material safety data sheets are available from your Reichhold sales representative. Such information should be requested from suppliers of all products and understood prior to working with their materials.

DIRECTLY MIXING ANY ORGANIC PEROXIDE WITH A METAL SOAP, AMINE, OR OTHER POLYMERIZATION ACCELERATOR OR PROMOTER WILL RESULT IN VIOLENT DECOMPOSITION