

PRODUCT BULLETIN

January 2015

NORPOL® SVG HX3

DESCRIPTION

NORPOL® SVG HX3 is a fire retardant gelcoat based on isophthalic/neopenthylglycol polyester resin.

NORPOL® SVG HX3 is approved for boat production in compliance with

- Det Norske Veritas' Rules for classification of High Speed, Light Craft and Naval Surface Craft
- Det Norske Veritas' Standards for Certification No. 2.20, Lifeboats and Rescue Boats, 2007

Recommended peroxide dosage: 1.3-2.0 %

Recommended film thickness: 0.55-0.85 mm (wet film)

Oxygen index: 25-27 %

TYPICAL PROPERTIES

PHYSICAL DATA IN LIQUID STATE AT 23°C

| Properties | Unit | Hand quality | Test method |
|---|------------------------|--------------|----------------|
| Viscosity | | | |
| - Brookfield RVF sp.4/4 rpm | mPa [·] s(cP) | 14000-30000 | A050 |
| - Cone & Plate | mPa [·] s(cP) | 600-900 | A010 |
| Density | g/cm³ | 1.1-1.7 | B020 |
| Flash point | °C | 32 | ASTM D 3278-95 |
| Geltime: 1.5% NORPOL® PEROXIDE 1 | minutes | 10-25 | G020 |
| Storage stability from date of production | months | 6 | G180 |

The information herein is to help customers determine whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before using them to satisfy themselves as to contents and suitability. 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 protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials, and in no event shall we be liable for special, incidental, or consequential damages.



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

| Properties | Unit | Value | Test method |
|-----------------------|---------------|-----------|-------------------------|
| Tensile strength | MPa | min. 60 | ISO 527-2: 2012 |
| Tensile modulus | MPa | min. 3000 | ISO 527-2: 2012 |
| Tensile elongation | % | min. 3.0 | ISO 527-2: 2012 |
| Heat distortion temp. | °C | min. 80 | ISO 75-2: 2013 |
| Hardness Barcol 934-1 | - | min. 40 | ASTM D 2583-13a |
| Water absorption | mg/test piece | max. 80 | Det norske Veritas 1981 |

^{*}Postcured for 24 hours at 60 °C

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