

August 2015

NORPOL® SVX-H

Preliminary

DESCRIPTION

NORPOL® SVX-H is a new gelcoat based on intumescent technology, which due to the nature of the materials used is inherently grey (SVX 800 H, slightly lighter than RAL 7001), and does not suit pigmentation to the wide range of colours we would normally offer. Transportation parts are typically painted so this should not detract from the performance level the system offers the end user.

NORPOL® SVX-H with **DION® 7721-00** meets HL3 system for use in the composite transportation sector, this offers the user margins of safety in end part construction and has potential use in the maximum number of scenarios commonly possible.

We recognise that train parts are typically painted and the user should ensure that any paint applied meets the requirements of EN 45545-2 or that the user satisfies themselves that their final part is compliant to the specification they require.

Recommended peroxide dosage: 1.3 - 2.0 %.

Recommended film thickness: 0.5 - 0.85 mm (wet film)

TYPICAL PROPERTIES**PHYSICAL DATA IN LIQUID STATE AT 23°C**

Properties	Unit		Test method
Viscosity specifications when approved in Reichhold plant :			
- Brookfield RVF sp.5/4 rpm	mPa.s(cP)	20000-45000	A050
- Brookfield RVF sp.5/20 rpm	mPa.s(cP)	12000-20000	A050
- Cone & Plate	mPa.s(cP)	1200-2000	A010
Density	g/cm ³	1.3-1.5	B020
Gel time: 1.5% NORPOL® PEROXIDE 1	minutes	15-35	G020
Storage stability from date of production and in unopened packaging	months	3	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	Values	Test Method
Tensile strength	MPa	Min. 60	ISO 527-1993
Tensile modulus	MPa	Min. 3000	ISO 527-1993
Tensile elongation	%	Min. 3.0	ISO 527-1993
Heat distortion temp.	°C	Min. 80	ISO 75-1993
Hardness Barcol 934-1	-	Min. 40	ASTM D 2583-99
Water absorption	Mg/test piece	Max. 80	Det norske Veritas 1981

* Post-cured 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