

# NORPOL GM

#### DESCRIPTION

NORPOL GM is a tooling gelcoat based on vinylester resin which provides maximum resistance to chemicals and solvents.

NORPOL GM gives the mould a lasting high gloss finish which will stand up to relatively large number of lifts between each waxing and polishing operation provided the tooling gelcoat is properly cured.

Owing to its high deformation temperature and flexibility NORPOL GM is a robust quality and consequently less susceptible to crack formation and dull patches.

The mould should not be put into service before the tooling gelcoat has achieved a hardness index of at least 35 Barcol (934-1). Minimum temperature during cure and postcure should be 18°C.

NORPOL GM might appear extremely thick, almost as a gel consistency, when the pail is opened. By stirring the thixotropy will be broken down to values corresponding to the product datasheet.

Apply a test sample of the tooling gelcoat before the main operation so as to make sure of a good result.

Available colours	: NORPOL 100 (clear), NORPOL 60014 (green), NORPOL 90000 (black)
Recommended peroxide level	: 1.3 - 1.8%
Recommended film thickness	: 0.55 - 0.85 mm (wet film)

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## **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 s(cP)	8000-15000	14000-24000	A050
- Cone & Plate	mPas(cP)	220-300	750-900	A010
Density	g/cm³	1.1-1.2	1.1-1.2	B020
Flash point	°C	32	32	ASTM D 3278-95
Gel time: 1.5% NORPOL PEROXIDE 1	minutes	10-25	10-25	G020
Storage stability from date of manufacture	months	4	4	G180

## MECHANICAL/PHYSICAL DATA FOR THE GELCOAT'S BASE 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. 2.0	ISO 527-1993
Heat distortion temp.	°C	min. 105	ISO 75-1993
Hardness Barcol	934-1	min. 35	ASTM D 2583-99

## 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