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# **POLYLITE® 32032-20**

## DESCRIPTION

POLYLITE® 32032-20 is a water-white, clear casting resin designed for applications in which extreme clarity and absence of colour are required. Castings made with POLYLITE® 32032-20 have the same refractive index as glass. Suggested applications include decorative castings, tabletops and biological encapsulations

POLYLITE® 32032-20 is a preaccelerated, UV stabilised orthophthalic polyester, with a low viscosity and low reactivity.

POLYLITE® 32032-20 contains methyl methacrylate to enhance weather resistance.

FEATURES	BENEFITS	
Acrylic-Modified	<ul><li>Refractive index of glass</li><li>Resistance to weathering</li></ul>	
Low viscosity	Outstanding air release	
Specially promoted	<ul><li>Short gel and cure times</li><li>Clear, water white when cured.</li></ul>	

## TYPICAL PROPERTIES

## PHYSICAL DATA IN LIQUID STATE AT 25°C

Properties	Unit	Value	Test Method
Viscosity:-			
Brookfield LV SP3/60 rpm	cps	300-400	ASTM 2196-86
Styrene Content	%	36-40	BS 6782: Part 1: 1987
Density	g/cm <sup>3</sup>	$1.10 \pm 0.02$	BS 3900: Part A12: 1975
Flash Point	°C	32	BS 3900: Part A9: 1986
Colour		Blue, clear	
Geltime: 1.25% BUTANOX M50	minutes	18-30	
Cure time	minutes	50-80	
Peak Exotherm		115-160	
Stability at 20°C from date of manufacture	months	3	

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.** 

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All POLYLITE® products are Quality Controlled with the specified catalyst. However, alternatives are available and all users should be aware that a single catalyst formulation cannot provide optimum results in all resin systems. The interaction between the catalyst and the inhibitor/accelerator systems used in our products is complex and varies from resin to resin. Consequently the gel and cure characteristics provided by alternate catalysts can vary greatly from those specified. It is, therefore, absolutely essential that the user evaluate each alternate catalyst in each product before full-scale manufacture is started.

#### MECHANICAL DATA IN THE CURED STATE

## Fully post-cured

Properties	Unit	Value	Test Method
Tensile Strength	MPa	69	ASTM D-638
Flexural Strength	MPa	90	ASTM D-790
Compressive Strength	MPa	138	ASTM D-785
Heat Dist. Temp	°C	74	ASTM D-648
Barcol Hardness	934-1	35-40	ASTM D 2583-1999

#### 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