

December 2007

# POLYLITE<sup>®</sup> 440-M720

Polyester resin for acrylic back-up

(Ex-PO-3520)

### DESCRIPTION

POLYLITE<sup>®</sup> 440-M720 is a medium reactive orthopthalic polyester resin.

POLYLITE<sup>®</sup> 440-M720 is accelerated and thixotropic.

POLYLITE<sup>®</sup> 440-M720 contains special additives which improve the working environment during and after application due to reduced styrene emission.

## APPLICATION

POLYLITE<sup>®</sup> 440-M720 is especially formulated for acrylic back-up by sanitary goods manufacturing. The resin impregnates the glassfibre rapidly and is designed for hand lay-up and spray-up application.

FEATURES	BENEFITS
<ul> <li>Low viscosity</li> </ul>	<ul> <li>Allows high filler loading</li> </ul>
<ul> <li>Excellent adhesion to PMMA</li> </ul>	<ul> <li>Final products withstand static and dynamic loading</li> </ul>
Versatility	<ul> <li>Suitable for hand lay-up and spray-up</li> </ul>
Statistically process	<ul> <li>Consistent performance, batch-to-batch</li> </ul>

and quality controlled by ISO 9001

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 sublidity 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



# PROPERTIES

# PHYSICAL DATA IN LIQUID STATE AT 23°C

Properties	Unit	Value	Test method
Viscosity			
<ul> <li>Brookfield LVF 2/12</li> </ul>	mPa <sup>·</sup> s(cP)	450 – 650	ASTM D 2196-86
- Cone/plate	mPa <sup>·</sup> s(cP)	140 - 160	ISO 2884-1999
Specific gravity	g/cm³	1,11	ISO 2811-2001
Acid value	mgKOH/g	max.30	ISO 2114-1996
Non volatile content	% weight	60 ± 2	B070
Flash point	°C	32	ASTM D 3278-95
Geltime: 1% NORPOL PEROXIDE 1 (MEKP)	minutes	10 – 15	G020
Reactivity at 23°C: 1% NORPOL PEROXIDE			
1 (MEKP)			DIN 16945
-25 – 35°C	minutes		
-25-Peak exotherm	minutes		
-Peak exotherm	°C	max. 100	
Storage stability from date of manufacture	months	6	-

# MECHANICAL/PHYSICAL DATA IN CURED STATE

Fully postcured.

Properties	Unit	Value	Test method
Tensile strength	MPa	50	ISO 527-1993
Tensile modulus	MPa	4600	ISO 527-1993
Tensile elongation	%	1,6	ISO 527-1993
Flexural strength	MPa	90	ISO 178-2001
Flexural modulus	MPa	4000	ISO 178-2001
Heat distortion temperature	°C	62	ISO 75-1993



## 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.

## PACKAGING FORM

Non-returnable 220 kg metal drums. Containers IBC 1000 kg. Road tank (bulk)

## 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.