

POLYLITE® 330-120

Translucent Sheet Resin for Continuous Lamination

DESCRIPTION

POLYLITE® 330-120 is general purpose ortho polyester resin for the manufacturing of maximum clarity roofing sheets.

POLYLITE® 330-120 is un-accelerated UV stabilized and slightly tinted blue to improve optical characteristics.

APPLICATION

POLYLITE® 330-120 is specially designed for maximum clarity translucent roofing sheets with the continuous sheeting process.

The principle involved in producing maximum clarity sheeting is that the refractive index of the cured resins must be equal to that of the glass reinforcement. The balance between the monomers in POLYLITE® 330-120 has been adjusted to match the refractive index of "E" powder bound glass mat.

In order to obtain the best possible clarity the glass mat must be clean dry, and have a suitable high solubility binder for roofing sheet production. Maximum clarity is dependant on the state of cure of the resin and it is usually obtained over 24 hours at ambient temperature, however to obtain this more quickly a post bake (i.e. 4 hours at 60°C) is desirable

If the sheeting is to be used for long term external application, some additional protection is required on the exposed surface. It is recommended that a surface tissue is incorporated into the laminate to ensure that one side has a resin-rich surface. GRP Sheeting should always be installed with the resin-rich surface on the exposed side.

Alternatively Melinex or PTFE should be incorporated on the exposed side in accordance with recommendation from the suppliers I.C.I. or Dupont

Similar to paints, the colour and appearance of unsaturated polyester resin products are affected by long term exposure to sunlight. Products of this type are chemically modified and contain proprietary UV absorbers to give extended weather stability and minimize any visual change.

UV absorbers work by preferentially absorbing the UV component of the sunlight, however, this is not 100% effective and with time the UV absorber is overcome. The rate depends on the actual climatic conditions experienced, resulting in possible colour change and/or surface degradation

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 suitability 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.

919-990-7500 • 800-448-3482 • P.O. Box 13582, Research Triangle Park, NC 27709 USA • 2400 Ellis Road, Durham, NC 27703 USA • www.reichhold.com

Reichhold UK Ltd. 54 Willow Lane, Mitcham, Surrey CR4 4NA, England, Tel. +44 20 8648 4684, Telefax +44 20 8640 6432
Reichhold Inc. PO Box: 16911, JAFZ, Dubai, UAE. Tel. +971 4 8835215, Fax; +971 4 8835887

February 01, 2005
POLYLITE® 330-120

FEATURES	BENIFITS
<ul style="list-style-type: none"> • Maximum clarity • Low Viscosity • Statistically process and quality controlled by ISO 9000-2000. 	<ul style="list-style-type: none"> • Clear Resin is Acrylic Modified and Refractive Index controlled with glass fiber gives maximum clarity on the sheet. • Fast impregnation at doctors blade gives smooth surface and faster production. • Batch-to-batch consistency.

TYPICAL PROPERTIES

PHYSICAL DATA IN LIQUID STATE AT 23°C

Properties	Unit	Value	Test Method
Viscosity:- ICI Cone and Plate	Cps	190-220	BS 2782: Part 7: Method 730B:1994
Density	g/cm ³	1.110	BS 3900: Part A12: 1975
Refractive Index		1.5278-1.5282	BS 648: Section 1.2: 1984
Acid Value	mg KOH/g	< 30	BS 2782: Part 4: Method 432B: 1976
Monomer		Styrene/MMA	
Flash Point	°C	14.5	BS 3900: Part A9: 1986
Geltime: 1.0% Cobalt Octate 1.0% 1.0% Butanox M50	Minutes	10-14	BS 2782: Part 8: Method 835C: 1980
Stability at 20°C	Months	6	from date of manufacture

MECHANICAL DATA IN THE CURED STATE

Fully post-cured

Properties	Unit	Value	Test Method
Tensile Strength	N/mm ²	55	BS 2782: Part 3: Method 320C: 1976
Tensile Elongation	%	2.0	BS 2782: Part 3: Method 320C: 1976
Flexural Strength	N/mm ²	90	BS 2782: Part 3: Method 335A: 1978
Tensile Modulus	N/mm ²	3500	BS 2782: Part 3: Method 320C: 1976
Volume Shrinkage	%	7.1	BS 2782: Part 6: Method 644A: 1986
Heat Distortion Temp	°C	50	BS 2782: Part 1: Method 121A: 1991
Water Absorption – 7 days	Mg	31	BS 2782: Part 4: Method 430A: 1983

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 suitability 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.

919-990-7500 • 800-448-3482 • P.O. Box 13582, Research Triangle Park, NC 27709 USA • 2400 Ellis Road, Durham, NC 27703 USA • www.reichhold.com

Reichhold UK Ltd. 54 Willow Lane, Mitcham, Surrey CR4 4NA, England, Tel. +44 20 8648 4684, Telefax +44 20 8640 6432
 Reichhold Inc. PO Box: 16911, JAFZ, Dubai, UAE. Tel. +971 4 8835215, Fax; +971 4 8835887

February 01, 2005
POLYLITE® 330-120

RECOMMENDED PEROXIDE

All POLYLITE products are Quality Controlled with the specified Peroxide. However, alternatives are available and all users should be aware that a single Peroxide formulation cannot provide optimum results in all resin systems. The interaction between the Peroxide 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 Peroxide can vary greatly from those specified. It is, therefore, absolutely essential that the user evaluate each alternate Peroxide in each product before full-scale manufacture is started.

Through thorough laboratory work we have found that some types of Peroxide formulation (such as the acetyl acetones) can lead to distinct cured color variation. We would, therefore, strongly recommend the use of single peroxide (Norpol Peroxide No.1 / Butanox M-50) especially where consistent light colors are required for the finished articles.

Safety Data Bulletin No. 1 applies to POLYLITE 330 - 120.

STORAGE

To ensure maximum stability and maintain optimum resin properties, POLYLITE resins should be stored in closed containers at temperatures below 25°C and away from heat sources and sunlight. All storage areas and containers should conform to local fire and building codes. Drum stock should be stored away from all sources of flame or combustion. Inventory levels should be kept to a reasonable minimum with first-in, first-out stock rotation.

PACKAGING FORM

Non-returnable 220 kg metal drums or returnable 1000 kg plastic containers, 20 kg pails may be delivered on request. ISO Road Tankers are available with approximately 24Tons supply.

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.

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 suitability 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.

919-990-7500 • 800-448-3482 • P.O. Box 13582, Research Triangle Park, NC 27709 USA • 2400 Ellis Road, Durham, NC 27703 USA • www.reichhold.com

Reichhold UK Ltd. 54 Willow Lane, Mitcham, Surrey CR4 4NA, England, Tel. +44 20 8648 4684, Telefax +44 20 8640 6432
Reichhold Inc. PO Box: 16911, JAFZ, Dubai, UAE. Tel. +971 4 8835215, Fax; +971 4 8835887