

**ENVIROLITE® 31325-00  
“Soy Oil Based” Molding Resin**

**DESCRIPTION**

ENVIROLITE® 31325-00 is an unpromoted, medium reactive, low viscosity unsaturated polyester molding resin derived in part from natural resources. The ENVIROLITE® 31325-00 was developed to incorporate new raw materials based on renewable resources. Specifically, this product is based on Soya Oil resin and has a “green” content of 25%. The product is intended as a general purpose molding resin for SMC, BMC, and Pultrusion applications. The soy resin yields laminates with mechanical properties/performance that are similar to standard SMC, BMC, and pultrusion resins.

**APPLICATION**

- ENVIROLITE® 31325-00 is intended for general purpose SMC, BMC, Pultrusion and wet-molding processes. It can be used by itself or in combination with other unsaturated polyester resin.

**FEATURES**

- Derived from Natural Oils
- Low Viscosity
- Flexible

**BENEFITS**

- Provides Renewable Content for “Green” Applications
- Formulation flexibility for high glass and filler content
- Good balance of mechanical properties and toughness

**TYPICAL USE GUIDELINES**

This product is primarily designed for SMC and pultrusion processes and uses standard cure and catalyst systems typically associated with these processes. Formulations for SMC, BMC, and pultrusion need to be developed based on FRP laminate design requirements including the profile type, cross-sectional thickness and preferred fiber content. The ENVIROLITE® 31325-00 is a unique material and requires significant input from Reichhold Technical in order to develop tailored customer solutions.

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.

**PROPERTIES**

**Typical Liquid Properties at 25°C (77°F) PolyLite 31325-00**

Property	Unit	Value	Test Method
Viscosity @ 25°C RV #2 @ 20 rpm	cPs	650 – 1250	18-021
Non-Volatiles	%	65.0 – 71.0	18-001
Acid Value	mg/g	20.0 – 30.0	18-010
Appearance	--	Clear Light Amber	18-043
Specific Gravity	--	1.020 – 1.250	18-030
Flash Point (Seta Closed Cup)	°C	32	ASTM D 3278-95
SPI Gel Time (1.0% BPO)	Minutes	4.0 – 10.0	18-051
SPI Cure Time	Minutes	1.5 - 5.0	18-051
SPI Peak Exotherm	°C	170 - 230	18-051
Shelf life, minimum	months	3	

**Typical Clear Cast Mechanical Properties**

Property	Units	Value	Test Method
Flexural Strength	MPa	90	D-780
Flexural Modulus	GPa	4.6	D-780
Tensile Strength	MPa	47	D-638
Tensile Elongation	%	3.1	D-638
Heat Deflection Temperature	°C	79	D-648

**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 the **REICHHOLD** application bulletin “Bulk Storage and Handling of Unsaturated Polyester Resins.” For information on other **REICHHOLD** resins, contact your sales representative or authorized **REICHHOLD** distributor.

**SHELF LIFE**

Shelf life is three months from date of shipment. Minimum shelf life performance refers to product in the original, unopened container.

**STANDARD PACKING**

This product is available in non-returnable 55-gallon metal drums (496 lbs. net) or 42,000 – 44,000-lb. tank truck.

**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. WHEN ADDING ORGANIC PEROXIDES TO A RESIN SOLUTION, PROMPTLY AND THOROUGHLY MIX THE RESULTING PRODUCT. NEVER ADD ORGANIC PEROXIDES TO A HOT DILUENT OR PROCESS. PREVENT CONTAMINATION WITH FOREIGN MATERIALS, INCLUDING WITHOUT LIMITATION, ACCELERATORS (SUCH AS DIMETHYL ANILINE, OTHER AMINES OR COBALT COMPOUNDS), HEAVY-METAL OXIDES OR SALTS (PARTICULARLY THOSE OF COBALT, IRON AND COPPER), STRONG ACIDS AND SANDING DUSTS. USE CLEAN CONTAINERS MADE OF GLASS, POLYPROPYLENE, TEFLON, POLYETHYLENE, OR CERAMIC TO PREVENT CONTAMINATION OF ORGANIC PEROXIDES DURING ITS HANDLING.

**TECHNICAL SUPPORT**

**For technical support call: 1-800-448-3482 Ext. 8195**

Each user must determine the suitability of this product to his particular mode of operation and intended end use application. A Reichhold representative will be available to assist in the proper selection of all Reichhold products available for commercial use.

ENVIROLITE® is a registered trademark of Reichhold, Inc.