PRODUCT BULLETIN

August 2018

POLYLITE® 31830-00

Flexible Isophthalic Acid Modified Polyester Blending Resin

DESCRIPTION

POLYLITE® 31830-00 is an un-promoted, low reactive, low viscosity, flexible, isophthalic acid modified unsaturated polyester resin dissolved in styrene.

POLYLITE® 31830-00 is typically blended with rigid resins to improve resilience and impact strength, but can be used alone. POLYLITE® 31830-00 resists corrosion, stains, and thermal shock better than other flexible blending resins. It is compatible with most general purpose resins, and can be cured at room temperature with the addition of the proper promoters and catalysts.

BENEFITS & FEATURES

- Tough and flexible resin
- Good corrosion resistance, stain resistance, and thermal shock resistance due to isophthalic structure
- Low shrinkage and low reactivity
- Excellent as a blending resin

PROPERTIES – LIQUID

Property(1)	Unit	31830-00
Appearance	-	Clear Light Amber
NVM	%	70.5
Viscosity(2)	cps	825
Acid Value	mg/g	12.0
SPI Gel Time(3)	minutes	6.0
SPI Cure Time	minutes	3.5
SPI Peak Exotherm	°C/°F	160/320
Specific Gravity	-	1.14
Flash Point (Seta Closed Cup)	°C/°F	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LV Spindle #3 at 60 RPM
3) 1.0% BPO

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting	Test Method
Tensile Strength	psi	3,000	ASTM D 638
Tensile Modulus	psi	148,000	ASTM D 638
Tensile Elongation	%	51	ASTM D 638
Flexure Strength	psi	3,000	ASTM D 790
Flexure Modulus	psi	68,000	ASTM D 790
Compression Strength	psi	4,000	ASTM D 695
Heat Deflection Temperature	°C/°F	32/89	ASTM D 648
Hardness	SD	78	ASTM D 2583
Water Absorption - 2 hours at 212°F - 24 hours at 73°F	 % gain % gain	 2.1260 0.3745	ASTM D 570

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.

APPLICATION

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

SHELF LIFE & STORAGE

The shelf life of POLYLITE® 31830-00 is 180 days from the date of manufacture from Polynt. To maximize usage life and maintain optimum properties, resins and gel coats should be stored in the original closed container at temperatures below 23°C/73°F and away from ignition sources and sunlight. Keep containers sealed to prevent moisture pick-up and monomer loss.

SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.