PRODUCT BULLETIN

October 2018

POLYLITE® 32154 Series

Universal Marble/Onyx/Granite Resin

DESCRIPTION

The universal resins in the POLYLITE® 32154 Series are moderately resilient, medium-reactivity, medium viscosity, orthophthalic casting resins. These unsaturated polyester resins are pre-promoted for room temperature cure using methyl ethyl ketone peroxide. They were designed for the manufacture of both onyx and marble and are versatile enough to make multiple size castings, vanities and large bathroom fixtures. Marble vanities made with POLYLITE® 32154 polyester resins will substantially exceed ICPA* and ANSI ** thermal shock standards when properly mixed, initiated and cured. Suggested applications include cultured marble, cultured onyx, cultured granite, casting recycled glass, casting recycled metals, and casting semi-precious gemstones.

**International Cast Polymers Alliance, Arlington, VA*
***American National Standards Institute, New York, NY*

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Maximizes efficiency due to controlled cure
- Minimizes warpage due to low shrinkage
- Medium viscosity results in excellent filler suspension
- Moderately resilient with good performance when tested to ASTM Z124.3 specifications
- Specially promoted to control gel and cure, low part exotherm, minimum warping, and excellent resistance to impact, thermal, and demolding cracks
- Meets California Rule 50 and SCAQMD Rule 1162 due to low styrene and high solids

PROPERTIES – LIQUID

Property(1)	**Unit**	**32154-15**	**32154-25**
Liquid Color	visual	Light Blue/Gray	Light Blue/Gray
Cured Color	visual	Light Amber/Pink	Light Amber/Pink
NVM	%	68	70
Viscosity(2)	cps	1,200	1,700
Gel Time(3)	minutes	20	11
Total Time to Peak	minutes	34	22.5
Peak Exotherm	°C/°F	150/302	149/300
Specific Gravity	g/cm³	1.125	1.14
Flash Point (Seta Closed Cup)	°C/°F	32/89	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LVF Spindle #3 at 30 RPM
3) 1.25 cc Luperox® DDM-9 per 100 g resin

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Test Method
Tensile Strength	psi	10,000	ASTM D 638
Tensile Modulus	psi	551,000	ASTM D 638
Tensile Elongation	%	2.2	ASTM D 638
Flexure Strength	psi	16,000	ASTM D 790
Flexure Modulus	psi	625,000	ASTM D 790
Compression Strength	psi	22,000	ASTM D 695
Compression Modulus	psi	465,000	ASTM D 695
Heat Deflection Temperature	°C/°F	53/127	ASTM D 648
Hardness, Barcol Model 934-1	HB	46	ASTM D 2583
Water Absorption - 2 hours at 212°F - 24 hours at 73°F	 % gain % gain	 1.0225 0.1559	ASTM D 570

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) 1.0 g of Norox® MEKP-9 per 100 g of resin. The resin was allowed to gel overnight (16 hrs) at 73 °F then post cured for 2 hrs. @ 150 °F followed by 2 hours at 250 °F.

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® 32154 Series resins is 120 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.