



POLYLITE® 33480 Series Terephthalic Polyester Resins

DESCRIPTION

POLYLITE® 33480 Series resins are resilient terephthalic acid-based resins, modified to enhance physical properties and provide excellent handling characteristics with optimized cost and performance. These resins are thixotropic and pre-promoted for use in spray-up, hand lay-up or filament winding. POLYLITE® 33480 Series resins can be used in applications requiring ambient temperature corrosion-resistance to mild acids and a variety of other moderately corrosive dilute media.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Excellent physical properties and corrosion resistance due to high molecular weight and modified terephthalic polymer
- Superior toughness and impact resistance. Ideal for marine, tooling and filament winding applications due to excellent tensile elongation, high heat deflection temperature
- Can be used for UST jacketing due to recognition under UL1746
- Suggested for structural laminate used in many food contact applications and conforms to FDA Title 21 CFR2420

PROPERTIES - LIQUID

Property ⁽¹⁾	Unit	33480-05	33480-55
Appearance	-	Amber Opaque	Amber Opaque
NVM	%	55	55
Viscosity ⁽²⁾	cps	600	700
Thix Index ⁽³⁾	-	2.40	2.40
Gel Time ⁽⁴⁾	minutes	15	22
Total Time to Peak	minutes	28	40
Peak Exotherm	°C/°F	174/345	174/345
Specific Gravity	g/cm ³	1.07	1.07

- 1) All properties at 25°C/77°F unless otherwise noted
- 2) Brookfield Viscometer RV Spindle #2 at 20 RPM
- 3) Brookfield Viscometer RV Spindle #2 at 2/20 RPM
- 4) 1.25 cc DDM-9 per 100 g resin



PRODUCT BULLETIN

May 2020

PROPERTIES – PHYSICAL

Property ⁽¹⁾	Unit	1/8 Inch Neat Resin Casting ⁽²⁾	1/8 Inch Laminate ⁽³⁾	Test Method
Tensile Strength	psi	10,000	14,000	ASTM D 638
Tensile Modulus	psi	44,000	127,000	ASTM D 638
Tensile Elongation	%	3.3	N/A	ASTM D 638
Flexure Strength	psi	18,000	23,000	ASTM D 790
Flexure Modulus	psi	47,000	112,000	ASTM D 790
Heat Deflection Temperature	°C/°F	93/200	N/A	ASTM D 648
Hardness, Barcol Model 934-1	HB	34	47	ASTM D 2583

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

2) Laminate Construction – V/M/M/V Glass content: 28% (V= 10-mil C-glass veil, M = 1.5 oz/ft² chopped strand mat)

APPLICATION

Refer to Polynt's Composites Applications Guide ("Cookbook") for equipment and application recommendations. 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® 33480 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.