PRODUCT BULLETIN

March 2018

POLYLITE® PO-4698 Series

Infusion / RTM Resin

DESCRIPTION

POLYLITE® PO-4698 Series is a medium reactive orthophthalic polyester resin with relatively high heat resistance and good mechanical properties. The resin is designed for resin transfer molding including vacuum injection molding and contains internal and air release agents. POLYLITE® PO-4698 Series is non-thixotropic and is pre-accelerated to cause rapid curing and Barcol development for rapid de-mold times. The curing system makes the resin versatile and suitable for a span of gel times by adjusting the amount and type of initiator.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Good mechanical properties, relatively high heat resistance, and good toughness due to improved orthophthalic resin
- Improved glass fiber wet-out and shorter infusion times due to low viscosity
- Faster demold times for improved through-put due to fast Barcol development

PROPERTIES – LIQUID

Property(1)	Unit	4698-03	4698-04	4698-05
NVM	%	57	54	55.5
Viscosity(2)	cps	155	100	130
Gel Time(3)	minutes	50 (@35°C)	50 (@25°C)	50 (@30°C)
Gel to Peak	minutes	20	25	25
Peak Exotherm	°C/°F	98/208	100/212	100/212
Specific Gravity	-	1.09	1.07	1.09
Flash Point (Seta Closed Cup)	°C/°F	32/89	32/89	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LV Spindle #2 at 20 RPM
3) 1.0 g MEKP 900/100.0 g resin – 100 g mass in 150 ml beaker

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting[2]	Test Method
Tensile Strength	psi	10,000	ASTM D 638
Tensile Elongation	%	5	ASTM D 638
Flexure Strength	psi	20,000	ASTM D 790
Flexure Modulus	psi	490,000	ASTM D 790
Heat Deflection Temperature	°C/°F	90/194	ASTM D 648
Hardness, Barcol Model 934-1	HB	45	ASTM D 2583

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) Cure conditions: Full Post Cure

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® PO-4698 Series 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.