PRODUCT BULLETIN

January 2023

STYPOL® RGPS1100, RGPS1700

Orthophthalic RTM Resin

DESCRIPTION

STYPOL® RGPS1100 and STYPOL® RGPS1700 are pre-promoted, orthophthalic resins containing styrene monomer. They are formulated for building reinforced plastic parts using closed molding processes. These processes include resin transfer molding (RTM), light RTM, and infusion processes such as vacuum bagging, SCRIMP®, and resin injection.

BENEFITS & FEATURES

- Low viscosity for good fiber wet-out and mold filling performance
- Rapid fill times
- Low color
- Good surface cosmetics
- Can be used with various initiators for customization of cycle times

PROPERTIES – LIQUID

Property(1)	Unit	RGPS1100	RGPS1700
Viscosity(2)	cps	95	90
Gel Time(3)	minutes	11.5	16.5
Gel to Peak	minutes	14	-
Peak Exotherm	°C/°F	179/355	-
Weight per Gallon	lbs/gal	9.10 (Max.)	9.05

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LVF Spindle #2 at 60 RPM
3) Azox 1.25%

PROPERTIES – PHYSICAL

Property(1)	Unit	Neat Resin Casting	Laminate	Test Method
Tensile Strength	psi	6,000	12,000	ASTM D 638
Tensile Modulus	psi	650,000	1,270,000	ASTM D 638
Tensile Elongation	%	1.2	1.6	ASTM D 638
Flexure Strength	psi	12,000	24,000	ASTM D 790
Flexure Modulus	psi	600,000	1,020,000	ASTM D 790
Heat Deflection Temperature	°C/°F	67/153	-	ASTM D 648

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

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 products available for commercial use.

SHELF LIFE & STORAGE

The shelf life of STYPOL® RGPS1100 and RGPS1700 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.