PRODUCT BULLETIN

August 2022

STYPOL RLPH-0922

Low Color Ortho/DCPD Blend RTM Resin

DESCRIPTION

STYPOL® RLPH-0922 is a low color RTM (resin transfer molding) resin. These resins are composed of a blend of orthophthalic resins for strength and toughness, and DCPD resin for high heat distortion characteristics and excellent surface cosmetics. STYPOL® RLPH-0922 is used for infusion and RTM processes in making FRP products.

BENEFITS & FEATURES

- Based on Polynt Composite's well established LLP Series of resins
- Blend of an orthophthalic resin for strength and toughness and a DCPD resin for high heat distortion characteristics and excellent surface cosmetics
- Low viscosity for good fiber wetting and mold filling performance
- Specifically formulated with low color and readily accepts pigmentation to produce color enhanced parts, but especially for white parts

PROPERTIES – LIQUID

Property(1)	Unit	RLPH-0922
Viscosity(2)	cps	100
Gel Time(3)	minutes	9
Gel to Peak	minutes	7.5
Peak Exotherm	°C/°F	189/373
Peak Exotherm, Laminate	°C/°F	57/135
Laminate 1st Barcol	hours	1.0 (Max.)
Laminate 20 Barcol	hours	1.5 (Max.)

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LV Spindle #2 at 60 RPM
3) 1.50% Arkema DDM-9

PROPERTIES – PHYSICAL

Property(1)	Unit	Neat Resin Casting	Laminate(2)	Test Method
Tensile Strength	psi	7,000	12,000	ASTM D 638
Tensile Modulus	psi	0.63×10^6	1.3×10^6	ASTM D 638
Tensile Elongation	%	1.1	1.4	ASTM D 638
Flexure Strength	psi	10,000	22,000	ASTM D 790
Flexure Modulus	psi	0.60×10^6	1.02×10^6	ASTM D 790
Heat Deflection Temperature	°C/°F	85/185	-	ASTM D 648

1) Physical properties were determined using internal Polynt test methods that are similar to those listed above.
2) Laminate – 30 weight % of CSM

PROPERTIES - REACTIVITY

Reactivity can be modified by selection of peroxide initiator. Initiator levels should range between 1 and 2.5% depending on temperature and process requirements.

Slower Cure/Lowest Exotherm	Standard Cure	Faster Cure/Highest Exotherm
CHP-blended MEKP peroxides such as United Initiators Norox® MCP75 or MCP	Arkema Luperox® DDM-9	Acetyl acetone peroxide (AAP), such as United Initiators Norox® Azox or Arkema Luperox® 224

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 STYPOL® RLPH-0922 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.