PRODUCT BULLETIN

May 2020

DION® 31057-00

Very High Reactivity Pultrusion & wet Molding Resin

DESCRIPTION

DION® 31057-00 resin was designed for use in applications where excellent gloss characteristics and fast cycle times or line speeds are desirable. DION® 31057-00 has been uniquely designed to yield high crosslink density, very high HDT, water, temperature and chemical resistance. This resin system is recommended for use with low profile additivies. Polyvinyl Acetate (PVA) is 100% compatible in this resin system. Suggested applications include window lineals and profiles where fast line speeds and aesthetics are desired.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- High heat distortion temperature (HDT), excellent chemical and water resistance, and good mechanical property retention at elevated temperatures due to high crosslink density
- 100% compatible with PVA
- High reactivity resulting in fast fiber wet out, glossy surfaces, and fast line speeds and cycle times

PROPERTIES – LIQUID

Property(1)	Unit	31057-00
NVM	%	69.0
Viscosity(2)	cps	3,500 ± 1,000
SPI Gel Time(3)	minutes	3.25
SPI Cure	minutes	1.0
SPI Peak Exotherm	°C/°F	246/474
Weight per Gallon	lbs/gal	9.2
Specific Gravity/Density	g/cm^3	1.125
Flash Point (Seta Closed Cup)	°C/°F	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RV Spindle #2 at 20 RPM
3) Initiator: 1.0% BPO crystals

PROPERTIES – PHYSICAL

Property(1)	Unit	Clear Casting	Test Method
Tensile Strength	psi	8,000	ASTM D 638
Tensile Modulus	psi	547,000	ASTM D 638
Tensile Elongation	%	1.5	ASTM D 638
Flexure Strength	psi	17,000	ASTM D 790
Flexure Modulus	psi	660,000	ASTM D 790
Heat Deflection Temperature	°C/°F	142/288	ASTM D 648

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

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 DION® 31057-00 is 180 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.

RELATED PRODUCTS

- DION® 31025-01 Lower viscosity version
- POLYLITE® 31615-20 SMC/BMC version
- DION® 31020-03 High reactivity isophthalic
- DION® 31610-00 FDA approved high reactivity isophthalic

SAFETY & WARRANTY

To receive a copy of our safety and warranty information, please email safetyandwarranty@polynt.com.