PRODUCT BULLETIN

May 2020

DION® 31033-02

Low Profile Pultrusion Resin

DESCRIPTION

DION® 31033-02 is a modified, high reactivity polyester resin designed for the pultrusion process. This resin is formulated for a variety of applications and part thickness. It can be used effectively in parts exceeding ½ inch wall thickness. The DION® 31033-02 is well suited for operations wanting to optimize line speed and produce parts with excellent surface finish.

Suggested applications include structural shapes, tool handles, utility poles, window and door profiles, bus panels, and delineators.

BENEFITS & FEATURES

- Batch-to-batch consistency and uniformity from production utilizing Statistical Process Control (S.P.C) & Statistical Quality Control (S.Q.C) techniques
- Will never phase separate due to stable one-pack system
- Extremely crack resistant due to controlled cure
- Minimal shrinkage produces smooth surfaces and excellent dimensional stability
- Fast line speeds and glossy surface from high reactivity

PROPERTIES – LIQUID

Property(1)	Unit	31033-02
NVM	%	58
Acid Number	mg KOH/g	12.5
Viscosity(2)	cps	1,500
SPI Gel Time(3)	minutes	4.0
SPI Cure	minutes	1.5
SPI Peak Exotherm	°C/°F	234/453
Weight per Gallon	lbs/gal	9.2
Specific Gravity	g/cm³	1.06
Flash Point (Seta Closed Cup)	°C/°F	32/89

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer LVF Spindle #3 at 30 RPM
3) 1.0% BPO crystals

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting	Test Method
Tensile Strength	psi	8,000	ASTM D 638
Tensile Modulus	psi	500,000	ASTM D 638
Tensile Elongation	%	2.0	ASTM D 638
Flexure Strength	psi	12,000	ASTM D 790
Flexure Modulus	psi	500,000	ASTM D 790
Heat Deflection Temperature	°C/°F	109/229	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® 31033-02 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.

SAFETY & WARRANTY

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