PRODUCT BULLETIN

May 2020

DION® 31049-00

Low Profile Pultrusion Resin

DESCRIPTION

DION® 31049-00 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® 31049-00 is well suited for operations wanting to optimize line speed and produce parts with excellent surface finish.

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

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	31049-00
NVM	%	63
Acid Number	mg KOH/g	8.0
Viscosity(2)	cps	1,250
SPI Gel Time(3)	minutes	3.8
Gel to Peak	minutes	1.6
Peak Exotherm	°C/°F	230/446
Specific Gravity	g/cm^3	1.10

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

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting	Test Method
Tensile Strength	psi	TBD	ASTM D 638
Tensile Modulus	psi	TBD	ASTM D 638
Tensile Elongation	%	TBD	ASTM D 638
Flexure Strength	psi	TBD	ASTM D 790
Flexure Modulus	psi	TBD	ASTM D 790
Heat Deflection Temperature	°C/°F	TBD	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® 31049-00 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.

SAFETY & WARRANTY

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