PRODUCT BULLETIN

October 2018

DION® 9100 PLUS

Bisphenol-Epoxy Vinyl Ester Resin

DESCRIPTION

DION® 9100 PLUS is a bisphenol-epoxy vinyl ester resin that provides corrosion-resistance in a wide variety of acidic and alkaline environments. This tough, high-strength resin can be used to produce glass-reinforced laminates with excellent impact and stress-fatigue resistance. DION® 9100 PLUS is ideal for pultrusion, filament winding operations, and applications that require resistance to corrosive environments and thermal cycling.

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 temperature stability, and resistance to a wide variety of corrosive environments. A premium epoxy vinyl ester polymer with inherent toughness, crack, and stress-fatigue resistance
- Can be used in food and beverage contact applications with chemical components listed under FDA 177.2520 Title 21
- Can be used in many potable water applications with laminates meeting BS6920 requirements
- Allows additional time for thick lay-ups, large diameter winding, and prolonged pot life due to extendable gel time technology

PROPERTIES – LIQUID

Property[1]	Unit	9100 PLUS
Appearance	-	Clear
Color, Gardner	-	3.0 (Max.)
NVM-SPI	%	55
Viscosity[2]	cps	370
Acid Number	mg/g	10 (Max.)
SPI Gel Time[3]	minutes	8
SPI Gel to Peak	minutes	3
SPI Peak Exotherm	°C/°F	200/392
Specific Gravity	-	1.07

1) All properties at 25°C/77°F unless otherwise noted
2) Brookfield Viscometer RVF Spindle #2 at 20 RPM
3) Initiator: 1.0 g BPO per 100 g resin

PROPERTIES – PHYSICAL

Property[1]	Unit	Neat Resin Casting	Test Method
Tensile Strength	psi	12,000	ASTM D 638
Tensile Modulus	psi	465,000	ASTM D 638
Tensile Elongation	%	6.26	ASTM D 638
Flexure Strength	psi	21,000	ASTM D 790
Flexure Modulus	psi	487,000	ASTM D 790
Heat Deflection Temperature	°C/°F	105/221	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® 9100 PLUS 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.