



CORVE8190

Thixotropic Vinyl Ester Resin

Technical Data Sheet

CORVE8190 is a promoted, thixotropic, corrosion resistant, epoxy vinyl ester resin for use in the manufacture of liner pipe using cured-in-place techniques. The corrosion resistance of this resin is comparable to CORVE8100, which is listed in "CoREZYN® Vinyl Ester Resins" publication 11/06 B-006c. Data on any specific testing or corrosion recommendations will be supplied upon request.

FEATURES	BENEFITS
• Moderate Composite Exotherm	• Resistant to distortion during cure cycle
• Fast Cure Time	• Shorter cycle times and fast hardness development
• Good Fiberglass Wet-Out	• High composites physical properties
• Tested Under ASTM D2990 for Flexural Modulus Creep	• Retains structural integrity under load in severe conditions

LIQUID PROPERTIES	RESULTS
Viscosity, Brookfield Model RV #4 Spindle @ 20 rpm, 77°F (25°C), cps	2,000-4,000
Thixotropic Index	2.9-3.9
Gel Time run in a 140°F (60°C) water bath, initiated with 1.0 phr of Perkadox 16 and 0.5 phr of Trigonox C *	
Gel Time, 130°F to 150°F (54-66°C), min:sec	10:00-20:00
Gel to Peak, 150°F (66°C) to Peak Exotherm Time, min:sec	2:00-10:00
Peak Exotherm	310-400°F (154-204°C)
Non-Volatile Content, %	58.0-66.0
Room Temperature Catalyzed Stability, hours	>24
Specific Gravity	1.05-1.08

TYPICAL PROPERTIES					
Thickness	1/8 inch (3.2 mm) Casting		1/4 inch (6.4 mm) Laminate		
Construction	Not Applicable		CIPP Felt Laminate		
Flexural Strength, ASTM D790	19,100 psi	132 MPa	11,000 psi	76 MPa	
Flexural Modulus, ASTM D790	4.7 x 10 ⁵ psi	3,241 MPa	5.1 x 10 ⁵ psi	3,500 MPa	
Tensile Strength, ASTM D638	11,000 psi	76 MPa	6,800 psi	47 MPa	
Tensile Modulus, ASTM D638	4.6 x 10 ⁵ psi	3,172 MPa	5.3 x 10 ⁵ psi	3,700 MPa	
Tensile Elongation, ASTM D638	4.2 %	4.2 %	2.0 %	2.0 %	
Barcol Hardness, 934-1 gauge, ASTM D2583	36	36	N/A	N/A	
Heat Distortion Temperature, ASTM D648	215 °F	102 °C	197 °F	92 °C	

* The gel time and reactivity will vary due to the type and concentration of Free Radical Initiator (catalyst), shop temperature, humidity, and type of fillers used. In order to meet your individual needs consult our technical sales representative for assistance. If using methyl ethyl ketone peroxide (MEKP) to gel and cure CoREZYN® vinyl esters, we recommend only these four brands: Cadox® L-50a (Akzo Nobel); Luperox® DHD-9 (Arkema); Hi-Point® 90 (Pergan); or Norox® MEKP-925 (Syrgis). These must be used at the appropriate percentage and suitable temperature. Contact your Interplastic Corporation representative for assistance.

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All specifications and properties specified above are approximate. Specifications and properties of material delivered may vary slightly from those given above. Interplastic Corporation makes no representations of fact regarding the material except those specified above. No person has any authority to bind Interplastic Corporation to any representation except those specified above. Final determination of the suitability of the material for the use contemplated is the sole responsibility of the Buyer. The Thermoset Resins Division's technical sales representatives will assist in developing procedures to fit individual requirements.

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