

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	Retains structural integrity under load in severe
Creep	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 150°F (66°C) water bath, catalyzed with 1.0 phr of Perkadox	
16 and 0.5 phr of Trigonox C *	
Gel Time, 140°F to 160°F (60-71°C), min:sec	10:00-20:00
Gel to Peak, 160°F (71°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	4.7×10^5	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.

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.

INTERPLASTIC CORPORATION

2015 Northeast Broadway Street Minneapolis, Minnesota 55413-1775 651.481.6860 Fax 612.331.4235

www.interplastic.com