



CORVE8300

Vinyl Ester Resin

Technical Data Sheet

CORVE8300 is a non-promoted, corrosion resistant, bisphenol A epichlorohydrin based, vinyl ester resin. Its uses include tank relining, pipe fabrication, tank construction, etc. CORVE8300 is manufactured from ingredients listed as acceptable in FDA Code of Federal Regulation Title 21, CFR 177.2420. This resin may be used safely as a component of articles intended for single or repeated use in contact with food as prescribed in the regulation.

FEATURES	BENEFITS
• High Physical Properties	• Makes extremely tough composites
• Highly Versatile Viscosity Properties	• Formulated for spray-up and hand lay-up needs
• Outstanding Corrosion Resistance	• Resists caustics and solvents with hydrolytic stability
• High Heat Distortion Resistance	• Maintains dimensional stability

LIQUID PROPERTIES	RESULTS
Viscosity, Brookfield Model LV #3 Spindle @ 60 rpm, 77°F (25°C), cPs	400-600
100 grams resin @ 77°F (25°C), promoted with 0.20 grams of 12% Cobalt and 0.05 grams N, N-Dimethylaniline, initiated with 1.2% MEKP-925H by volume *	16:00-19:00 9:00-15:00 330-360°F (165-182°C)
Gel Time, min:sec	
Gel to Peak Exotherm Time, min:sec	
Peak Exotherm	
Non-Volatile Content, %	53.5-56.0
Hazardous Air Pollutant (Styrene) Content, %	44.0-46.5
Specific Gravity	1.02-1.05

TYPICAL PROPERTIES					
Thickness	1/8 inch (3.2 mm) Casting		1/8 inch (3.2 mm) Laminate		
Construction	Not Applicable		4 Plies 1.5 oz/ft ² , 30% Glass Mat		
Flexural Strength, ASTM D790	19,400 psi	133 MPa	23,600 psi	163 MPa	
Flexural Modulus, ASTM D790	4.9 x 10 ⁵ psi	3,400 MPa	12.0 x 10 ⁵ psi	8,276 MPa	
Tensile Strength, ASTM D638	12,400 psi	86 MPa	16,000 psi	110 MPa	
Tensile Modulus, ASTM D638	4.8 x 10 ⁵ psi	3,300 MPa	11.0 x 10 ⁵ psi	7,586 MPa	
Tensile Elongation, ASTM D638	6.8 %	6.8 %	-- %	-- %	
Barcol Hardness, 934-1 gauge, ASTM D2583	36	36	--	--	
Heat Distortion Temperature, ASTM D648	214 °F	101 °C	-- °F	-- °C	
Compressive Strength, ASTM D695	-- psi	-- MPa	30,000 psi	207 MPa	
Compressive Modulus, ASTM D695	-- psi	-- MPa	9.0 x 10 ⁵ psi	6,207 MPa	

* 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 ester resins we recommend only these three brands: Cadox® L-50a (Akzo Nobel); Luperox® DHD-9 (Arkema); and Norox® MEKP-925H (United Initiators). These must be used at the appropriate percentage and suitable temperature. Contact your Interplastic Corporation representative for assistance.

TYPICAL PROPERTIES, continued			
Thickness	1/4 inch (6.4 mm) Laminate		
Construction	40% Reinforcement**		
Flexural Strength, ASTM D790	33,700 psi	232 MPa	
Flexural Modulus, ASTM D790	11.1 x 10 ⁵ psi	7,655 MPa	
Tensile Strength, ASTM D638	25,600 psi	177 MPa	
Tensile Modulus, ASTM D638	16.1 x 10 ⁵ psi	11,103 MPa	

** Laminate Sequence: Veil, 1.5oz/ft² mat, 1.5oz/ft² mat, 24oz/ft² woven roving, 1.5oz/ft² mat, 24oz/ft² woven roving, 1.5oz/ft² mat

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. Our technical sales representatives will assist in developing procedures to fit individual requirements, but all advice is accepted at your risk and should be checked for suitability to your particular processes. These test data and properties are based on results obtained for a specific material under the specified test conditions. They are not to be used as specifications and are not warranted as performance attributes for any product or system. Specifications and properties of standard production material may vary slightly from those in this report. Interplastic Corporation makes no warranties regarding any material and/or samples described in this report unless that representation is provided to your company in writing by a Technical Director of Interplastic Corporation or one of his or her managers.

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