Vipel® F086-HHH-00

Vinyl Ester

AOC, L.L.C.

Message:

Vipel Corrosion Resistant Epoxy Novolac, Vinyl Ester Resin
The Vipel F086 series is an epoxy novolac vinyl ester resin dissolved in styrene and designed for high temperature resistance.
The Vipel F086 series is ideally suited for use in hand lay-up, spray-up, and filament winding processes where outstanding mechanical properties and resistance to chemicals, oxidation and heat are required.
Corrosion resistance
Vipel F086 is designed for high temperature resistance. The epoxy novolac backbone provides resistance to acids and has superior resistance to many organic solvents. Vipel F086 series is generally resistant to liquids and vapors at higher temperatures than standard bisphenol-A epoxy vinyl ester resins or standard novolacs.
Refer to AOC's "Corrosion Resistant Resin Guide" for corrosion resistance information or for questions regarding suitability of a resin to any particular chemical environment contact AOC.
Mechanical Properties
The Vipel F086 series is suitable for moldings that are subjected to particularly high temperature applications.
Versatile
Suitable for various fabricating methods such as hand lay-up, filament winding, etc.

General Information	
Features	Acid Resistant
	Base Resistant
	Good Chemical Resistance
	Good Corrosion Resistance
	High ESCR (Stress Crack Resist.)
	High Heat Resistance
	Oxidation Resistant
	Solvent Resistant
Uses	Coating Applications
	Filaments
Forms	Liquid
Processing Method	Filament Winding
	Hand Lay-up
	Spraying

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.12	g/cm³	
Styrene Content	25	%	
Gel Time [1] (82°C)	12.0	min	
Gel to Peak	5.0	min	
Peak Exotherm	186	°C	

Hardness	Nominal Value	Unit	Test Method

Barcol Hardness	41		ASTM D2583
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3790	MPa	ASTM D638
Tensile Strength (Yield)	82.7	MPa	ASTM D638
Tensile Elongation (Break)	2.8	%	ASTM D638
Flexural Modulus	4210	MPa	ASTM D790
Flexural Strength	155	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	166	°C	ASTM D648
Thermoset	Nominal Value	Unit	
Thermoset Mix Viscosity [2] (25°C)	2800	cP	
NOTE			
1.	Gel time with 0.25% Cobalt 6%, 0.05% DMA and 1.25% MEKP		
2.	Brookfield RV viscosity spindle #3 AT 20 rpm		

Recommended distributors for this material

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