

Derakane® 510B-400

Vinyl Ester

Ashland Performance Materials

Message:

DERAKANE 510 B-400 Epoxy Vinyl Ester Resin is a low viscosity, unpromoted, flame retardant") epoxy vinyl ester. This resin offers exceptional processing characteristics including little to no foaming, excellent exotherm control, and industry-leading storage stability. Laminates made with DERAKANE 510 B-400 resin have achieved a flame spread of 25 (ASTM E-84). DERAKANE 510 B-400 resin gives final products with:

- Excellent flame retardancy
- High strength characteristics
- Excellent impact strength and toughness
- Fast wet-out and low drainage
- Excellent corrosion resistance to acidic and alkaline environments

APPLICATIONS AND USE

DERAKANE 510 B-400 resin can be used for corrosion resistant, reinforced thermosetting plastic equipment including filament wound, hand lay-up and spray-up tanks, pipes, ducts, stacks, scrubbers, linings or other equipment handling corrosive gases, vapors or liquids where a high degree of flame retardancy is required.

General Information	
Features	Low viscosity
	High strength
	Impact resistance, good
	Workability, good
	Good corrosion resistance
	alkali resistance
	acid resistance
	Good toughness
	Flame retardancy
Uses	Laminate
	Lining
	Piping system
	Water tank
Forms	Liquid
Processing Method	Filament power winding
	Hand coating

Physical	Nominal Value	Unit	Test Method
Solution Viscosity ¹	425	mPa · s	
Gardner Color			
Solids Content	57	%	
Hardness	Nominal Value	Unit	Test Method
Barcol Hardness	35		ASTM D2583
Mechanical	Nominal Value	Unit	Test Method

Tensile Modulus	3520	MPa	ASTM D638
Tensile Strength	90.0	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	4.7	%	ASTM D638
Fracture	5.5	%	ASTM D638
Flexural Modulus	3450	MPa	ASTM D790
Flexural Strength	152	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	106	°C	ASTM D648
Additional Information			
Properties of cured casting at 25°C.			
NOTE			

1.
- Brookfield #2 spindle @ 30 rpm

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Recommended distributors for this material

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