Vipel® K022-ACP-20

Vinyl Ester

AOC, L.L.C.

Message:

AOC's Vipel K022 series is a brominated bisphenol A epoxy vinyl ester resin dissolved in styrene. Vipel K022 series is ideally suited for use in hand lay-up, spray-up, filament winding and pultrusion processes where outstanding mechanical properties and excellent resistance to chemicals and heat are required. Vipel K022-CN series contains antimony products.
BENEFITS
Fire Retardant
Some Vipel K022 versions do not require antimony trioxide to meet ASTM E 84 Class I flame spread requirements.
Mechanical Properties
Vipel K022 is suitable for moldings that are subjected to particularly high static or dynamic loads. Vinyl ester resins have excellent resistance to sustained heat.
Versatile
Wide formulating capabilities allow for use in many processes and for optimization of cost/performance.
Corrosion Resistance
Vipel K022 is highly resistant to a number of chemical environments. 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.

General Information	
Additive	Flame retardancy
Features	Good corrosion resistance Good chemical resistance Heat resistance, high brominated Flame retardancy
Agency Ratings	ASTM E 84 Class I
Forms	Liquid
Processing Method	Filament power winding Sprayable pultrusion Hand coating

Physical	Nominal Value	Unit	Test Method
Styrene Content	39	%	
Flame Spread	25.0		ASTM E84
Smoke Developed	500		ASTM E84
Gel to Peak	11.0	min	
Peak Exotherm	185	°C	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Barcol Hardness	39		ASTM D2583
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	3590	MPa	ASTM D638

Tensile Strength	86.2	MPa	ASTM D638
Tensile Elongation (Break)	4.7	%	ASTM D638
Flexural Modulus	3650	MPa	ASTM D790
Flexural Strength	147	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	116	°C	ASTM D648
Uncured Properties	**Nominal Value**	**Unit**	
Density	1.16	g/cm³	
Viscosity (25°C, Brookfield RVT)	0.45	Pa·s	
Gel Time (25°C)	20	min	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China