

# Vipel® K022-ACT-45

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	40	%	
Flame Spread	25.0		ASTM E84
Smoke Developed	500		ASTM E84
Gel to Peak	17.0	min	
Peak Exotherm	170	°C	
Thixotropic Index	2.50		
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	1.14	g/cm <sup>3</sup>	
Viscosity (25°C, Brookfield RVT)	0.45	Pa·s	
Gel Time (25°C)	45	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



WECHAT