# Vipel® K733-ABB-00

### Polyester Alloy

AOC, L.L.C.

#### Message:

Firepel® Polyester Resin for Filled Fire Retardant Applications

AOC's Firepel® K320-A series are promoted, non thixotropic resins specifically designed to be blended with alumina trihydrate (ATH) to provide fire retardant properties. ATH is needed to provide fire retardant properties.

Firepel® K320-A series resins are used for mass transit applications. Flammability of composite parts is dependent on the geometry of the part, degree of cure, reinforcement content, types of reinforcement, etc. It is the end user's responsibility to ensure that finished parts meet the required specifications. Published flammability properties should be used for comparison purposes only.

Fire Resistance

Firepel® K320-A series resins are designed for use in filled applications where fire retardancy and low smoke emissions are required. Toxicity

Composites made with Firepel® K320- A series resins have low toxicity values due to the absence of halogens.

General Information					
Features	Flame Retardant				
	Good Chemical Resistance				
	Good Corrosion Resistance				
	Isophthalic				
Uses	Filaments				
Forms	Liquid				
Processing Method	Filament Winding				
	Hand Lay-up				
	Spraying				
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	1.21	g/cm³			
Styrene Content	39	%			
Flame Spread Index	20.0		ASTM E84		
Smoke Developed	600		ASTM E84		
Exotherm					
Gel to Peak	15.0	min			
Peak	179	°C			
Gel Time (25°C) <sup>1</sup>	35.0	min			
Hardness	Nominal Value	Unit	Test Method		
Barcol Hardness	40		ASTM D2583		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	3860	MPa	ASTM D638		
Tensile Strength (Yield)	64.8	MPa	ASTM D638		
Tensile Elongation (Break)	1.9	%	ASTM D638		
Flexural Modulus	4140	MPa	ASTM D790		

Flexural Strength	120	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	90.0	°C	ASTM D648
Thermoset	Nominal Value	Unit	
Thermoset Mix Viscosity <sup>2</sup> (25°C)	185	cP	
NOTE			
1.	Gel time with 0.25% Coblat 6 and 1.25% MEKP		
2.	Brookfield RV viscosity spindle 2 at 20 rpm		

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#### Recommended distributors for this material

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