Firepel® K130-PTE-12

Polyester Alloy

AOC, L.L.C.

Message:

Firepel® Polyester Resin for Fire Retardant Applications

Firepel® K130 series resin are designed forfire resistant applications where ASTM E 84 Class I flame and smoke development are required. 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.

Firepel® K130-AAA-00 is the concentrated highly brominated base resin that is used to manufacture the other versions. Firepel K130-AAA-00 can be used to manufacture specific tailored formulations.

Fire Retardant

Firepel® K130 PT, NN and TT series meet ASTM E 84 Class I flame and smoke requirements.

Low VOC

All Firepel K130 versions contain less than 35% styrene.

Versatile

Suitable for various fabricating methods such as hand lay-up, spray-up, filament winding, etc. The Firepel® K130 series molecular architecture provides an excellent balance of fire retardant, physical properties and cost.

General Information	
Features	Brominated
	Flame Retardant
	Low VOC
Uses	Coating Applications
	Filaments
Forms	Liquid
Processing Method	Filament Winding
	Hand Lay-up
	Spraying

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.29	g/cm³	
Styrene Content	33	%	
Flame Spread Index	25.0		ASTM E84
Smoke Developed	135		ASTM E84
Exotherm			
Gel to Peak	10.0	min	
Peak	190	°C	
Gel Time (25°C) ¹	12.0	min	
Thixotropic Index ²	3.00		
Hardness	Nominal Value	Unit	Test Method
Barcol Hardness	45		ASTM D2583

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4000	MPa	ASTM D638
Tensile Strength (Yield)	73.8	MPa	ASTM D638
Tensile Elongation (Break)	2.2	%	ASTM D638
Flexural Modulus	4070	MPa	ASTM D790
Flexural Strength	106	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8			
MPa, Unannealed)	90.0	°C	ASTM D648
Flammability	Nominal Value	Unit	Test Method

ΗВ

V-0

Flame Rating	5V		UL 94
Oxygen Index	39	%	ASTM D2863
Thermoset	Nominal Value	Unit	
Thermoset Mix Viscosity ³ (25°C)	550	сР	
NOTE			
1.	Gel time with 1.25% MEKP		
2.	2/20 rpm Thix Index		
	Brookfield RV viscosity spindle 2 at		
3.	20 rpm		

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

