

Vipel® F701-FBY-45

Polyester Alloy

AOC, L.L.C.

Message:

Vipel Corrosion Resistant Isophthalic Polyester Resin

AOC's Vipel F701 series resins are high molecular weight, two stage isophthalic, unsaturated polyester resin with the wet out, cure and handling characteristics of general purpose resins.

They have an excellent shelf life and are ideal for filament winding and spray-up. A few selected resins are listed below including the high viscosity base resin, Vipel F701-FHG-00.

Corrosion resistance

AOC's Vipel F701 series resins provides excellent corrosion resistance when used in contact with inorganic and organic acids. Solvent resistance is field-proven for many petroleum

products such as kerosene, heating oil and crude oils. 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.

Versatile

Suitable for various fabricating methods such as hand lay-up, spray-up, filament winding, etc.

Food and Drug

All resins in this datasheet are manufactured from raw materials that are listed in FDA regulation Title 21 CFR 177.2420. It is the fabricator's responsibility to also be sure that the final composite is well cured. All composites used for FDA applications should be post cured at 180°F/82°C for at least 4 hours.

After post curing it should be washed with soap and water and rinsed.

General Information			
Features	Acid Resistant Food Contact Acceptable Good Corrosion Resistance High Molecular Weight Isophthalic Solvent Resistant		
Uses	Coating Applications Filaments		
Agency Ratings	FDA 21 CFR 177.2420		
Forms	Liquid		
Processing Method	Filament Winding Hand Lay-up Spraying		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.08	g/cm ³	
Styrene Content	44	%	
Exotherm			
Gel to Peak	20.0	min	
Peak	166	°C	
Gel Time (25°C) ¹	45.0	min	

Thixotropic Index ²	2.50		
Hardness	Nominal Value	Unit	Test Method
Barcol Hardness	43		ASTM D2583
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3790	MPa	ASTM D638
Tensile Strength	83.4	MPa	ASTM D638
Tensile Elongation (Break)	2.8	%	ASTM D638
Flexural Modulus	4210	MPa	ASTM D790
Flexural Strength	127	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	107	°C	ASTM D648
Thermoset	Nominal Value	Unit	
Thermoset Mix Viscosity ³ (25°C)	700	cP	
Post Cure Time (82°C)	4.0	hr	

NOTE

1. Gel time with 1.25% MEKP
2. 2/20 rpm Thix Index
3. LV viscosity spindle 3 at 60 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

