

# APTIV® 1300

Polyetheretherketone

Victrex plc

## Message:

APTIV® 1300 film is the black version of unfilled semi-crystalline films made from VICTREX® PEEK™ polymer. The film provides a material solution for engineers in ultra-high performance applications offering an alternative option to the APTIV 1000 natural product. APTIV 1300 film has a unique combination of properties providing high temperature performance, light weight, mechanical strength, durability, excellent radiation, hydrolysis and chemical resistance, electrical insulation, wear and abrasion resistance, excellent barrier properties with high purity, good flammability without the use of flame retardants, low toxicity of combustion products and low moisture absorption in a film format. Inherently halogen free and providing ease of processing makes APTIV films a technology enabler for OEMs, our customers and end users.

General Information	
UL YellowCard	E161131-10112827
Features	Barrier Resin
	Clean/High Purity
	Durable
	Electrically Insulating
	Excellent Printability
	Flame Retardant
	Good Abrasion Resistance
	Good Chemical Resistance
	Good Processability
	Good Toughness
	Good Wear Resistance
	Halogen Free
	Heat Sealable
	High Heat Resistance
	High Strength
	Hydrolysis Resistant
	Low Moisture Absorption
	Low Smoke Emission
	Low Toxicity
	Metallizable
Uses	Radiation (Gamma) Resistant
	Recyclable Material
	Semi Crystalline
	Weldable
	Aerospace Applications
	Compounding
	Diaphragms
	Film

Insulation  
Laminates  
Membranes  
Tape  
Washer

Agency Ratings	EU 2002/72/EC
	EU 2004/19/EC
	FDA 21 CFR 177.2415

RoHS Compliance	RoHS Compliant
Appearance	Black
Forms	Film
Processing Method	Coating
	Laminating
	Thermoforming

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.30	g/cm <sup>3</sup>	ISO 1183
Shrinkage <sup>1</sup>			
MD : 200°C, 50.0 µm	< 2.0	%	
TD : 200°C, 50.0 µm	< 2.0	%	
Puncture Resistance (23°C, 50.0 µm)	5.00	kJ/m <sup>2</sup>	Internal Method
Films	Nominal Value	Unit	Test Method
Film Thickness - Recommended / Available	50 to 100 µm		
Tensile Modulus			ISO 527-3
MD : 23°C, 50 µm	2500	MPa	
TD : 23°C, 50 µm	2500	MPa	
MD : 23°C, 100 µm	2400	MPa	
TD : 23°C, 100 µm	2300	MPa	
Tensile Stress			ISO 527-3
MD : Break, 23°C, 50 µm	120	MPa	
TD : Break, 23°C, 50 µm	110	MPa	
MD : Break, 23°C, 100 µm	120	MPa	
TD : Break, 23°C, 100 µm	110	MPa	
Tensile Elongation			ISO 527-3
MD : Break, 23°C, 50 µm	> 150	%	
TD : Break, 23°C, 50 µm	> 150	%	
MD : Break, 23°C, 100 µm	> 150	%	
TD : Break, 23°C, 100 µm	> 150	%	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity <sup>2</sup> (23°C, 0.0500 mm)	4.0E+16	ohms · cm	ASTM D257

Dielectric Strength <sup>3</sup> (23°C, 0.0500 mm)	190	kV/mm	ASTM D149
NOTE			
1.	TM-VX-84		
2.	100 V		
3.	6.25 mm electrode		

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

