APTIV™ FILMS 1300

General Information

Product Description

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.

Material Properties

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.30	g/cm³	ISO 1183
Shrinkage [1]			
MD : 200°C, 50.0 µm	< 2.0	%	
TD : 200°C, 50.0 µm	< 2.0	%	
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 [2] (23°C, 50 µm)	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength [3] (23°C, 50 µm)	190	kV/mm	ASTM D149

Notes

[1] TM-VX-84

[2] 100 V

[3] 0.25 inch electrode

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