

Product Texts

Easy to process – can be laminated to other materials, thermoformed, metallised, coated, printed, stamped and die cut, welded and heat sealed. APTIV 1000 acts an excellent electrical insulator across a wide range of temperatures and electrical frequencies.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	0.5	%	ISO 294-4, 2577

Thermal properties

	Value	Unit	Test Standard
ASTM Data			
Coefficient of Thermal Expansion, MD	47	E-6/K	ASTM D 696

Electrical properties

	Value	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	190 ^[1]	kV/mm	ASTM D 149
Volume Resistivity	4E16	Ohm*cm	ASTM D 257

1: 50 µm

Other properties

	Value	Unit	Test Standard
Humidity absorption	0.04	%	Sim. to ISO 62
Density	1300	kg/m ³	ISO 1183

Film Properties

	Value	Unit	Test Standard
ISO Data			
Tensile Modulus, parallel	2500	MPa	ISO 527-3
Tensile Modulus, normal	2500	MPa	ISO 527-3
Stress at break, parallel	130	MPa	ISO 527-3
Stress at break, normal	120	MPa	ISO 527-3
Maximum strain, parallel	150	%	ISO 527-3
Maximum strain, normal	150	%	ISO 527-3
Trouser Tear resistance, parallel	6	N/mm	ISO 6383-1
Trouser Tear resistance, normal	8	N/mm	ISO 6383-1
Thickness of specimen	0.05	mm	-

Characteristics**Processing**

Film Extrusion, Coating, Thermoforming

Delivery form

Semifinished product, Film

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Features

Acoustical Barrier Properties, Barrier Properties, Good Adhesion, Heat Sealable, Laser Markable, Low Emission, Low Smoke, Tribologic Grade, Weldable

Chemical Resistance

General Chemical Resistance, Hydrolytically Stable, Radiation Resistance

Certifications

Food contact, Food approval 1935/2004/EC, Food approval FDA 21 CFR, RoHS compliant

Applications

Aircraft and Aerospace, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa