



Hytrel®

thermoplastic polyester elastomer

Hytrel® 4056

Hytrel® 4056 is a low modulus, 62 MPa, Hytrel® grade, with nominal durometer hardness of 40D. It contains a non-discoloring antioxidant package. It is not recommended for injection molding process.

Property	Test Method	Units	Value
Mechanical			
Tensile Stress	ASTM D 638	MPa (kpsi)	
Strain 5%			2.4 (0.4)
Strain 10%			3.6 (0.5)
Tensile Strength at Break	ASTM D 638	MPa (kpsi)	21 (3.0)
Elongation at Break	ASTM D 638	%	700
Poisson's Ratio	ASTM E 132		0.45
Flexural Modulus	ASTM D 790 IB	MPa (kpsi)	
-40C (-40F)			155 (22.5)
23C (73F)			62 (9.0)
100C (212F)			27 (3.9)
Hardness, Durometer D	ASTM D 2240		40
Izod Impact	ASTM D 256 A	J/m (ft lb/in)	
-40C (-40F), 6.35mm (0.25in)			NB
23C (73F), 6.35mm (0.25in)			NB
Ross (pierced), 5X Cut Growth	ASTM D 1052	cycles	>1 E6
Initial Tear Resist., Die C	ASTM D 1004	kN/m (lb/in)	101 (580)
Thermal			
Heat Deflection Temperature	ASTM D 648	°C (°F)	
0.45MPa (66psi)			54 (129)
Melting Point	ASTM D 3418	°C (°F)	150 (302)
Vicat Softening Point	ASTM D 1525 B	°C (°F)	108 (226)
Flow			
Melt Flow Rate	ASTM D 1238	g/10 min	
2.16kg at 190C			5.3

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Mechanical properties measured at 23°C (73°F) unless otherwise stated.

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Product Information

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Property	Test Method	Units	Value
Electrical			
Volume Resistivity 3x5x0.075in	ASTM D 257	ohm cm	82 E9
Dielectric Strength, Short Time 3x5x0.075in	ASTM D 149	kV/mm (V/mil)	16.1 (410)
Dielectric Constant	ASTM D 150		
1E2 Hz, 3x5x0.075in			5.2
1E3 Hz, 3x5x0.075in			5.1
1E6 Hz, 3x5x0.075in			4.6
Dissipation Factor	ASTM D 150		
1E2 Hz, 3x5x0.075in			0.005
1E3 Hz, 3x5x0.075in			0.008
1E6 Hz, 3x5x0.075in			0.06
Flammability			
Rating @ Thickness	UL94		HB
Thickness Tested	UL94	mm	1.47
Other			
Specific Gravity	ASTM D 792		1.17
Taber Abrasion	ASTM D 1044 modified	mg	
CS-17 Wheel, 1kg, 1000 cycles			3
H-18 Wheel, 1kg, 1000 cycles			100
Water Absorption	ASTM D 570	%	
Immersion 24h			0.6
Mold Shrinkage	ASTM D 955	%	
Flow, 3.2mm (0.126in)			0.5
Processing			
Melt Temperature Range		°C (°F)	180-205 (356-400)
Mold Temperature Range		°C (°F)	<45 (<115)
Processing Moisture Content		%	<0.1

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