DuPont™ Hytrel®

thermoplastic polyester elastomer

Hytrel® DYM250S BK472

Hytrel® DYM250S BK472 is a medium modulus resin suited for injection molding of Air Bag Deployment Doors. It has a nominal durometer hardness of 49D and contains fine particle size carbon black.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		TPC-ET+PBT
Part Marking Code	ISO 11469		>TPC-ET+PBT<
Mechanical			
Tensile Stress	ISO 527	MPa (kpsi)	
@ 10% Strain			10 (1.5)
@ 50% Strain			13 (1.9)
Stress at Break	ISO 527	MPa (kpsi)	30 (4.4)
Strain at Break	ISO 527	%	500
Tensile Modulus	ISO 527	MPa (kpsi)	230 (33.4)
Flexural Modulus	ISO 178	MPa (kpsi)	250 (36)
Hardness, Shore D	ISO 868		
15s			46
Maximum			49
Brittleness Temperature	ISO 974	°C (°F)	-100 (-148)
Tear Strength	ISO 34-1 method B/a	kN/m (lb/in)	
Normal			90 (514)
Parallel			110 (629)

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
Test specimen for ISO 527 is 1BA (2mm) at 50mm/min; all other ISO & ASTM mechanical properties measured at 4mm; ISO electrical properties measured at 2mm.
All mechanical & electrical properties measured on injection molded specimens.
Test temperatures are 23°C unless otherwise stated.

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Property	Test Method	Units	Value
Thermal			
Deflection Temperature	ISO 75f	°C (°F)	
0.45MPa			50 (122)
1.80MPa			40 (104)
Melting Temperature	ISO 11357-1/-3	°C (°F)	
10°C/min			222 (432)
Vicat Softening Temperature	ISO 306	°C (°F)	
10N, 50°C/h			150 (302)
Rheological			
Melt Mass-Flow Rate	ISO 1133	g/10 min	
240°C, 2.16kg			15
Other			
Density	ISO 1183	kg/m^3 (g/cm^3)	1160 (1.16)
Processing - Injection Molding			
Melt Temperature Optimum		°C (°F)	245 (473)
Mold Temperature Range		°C (°F)	45-55 (115-130)
Mold Temperature Optimum		°C (°F)	45 (115)
Drying Time, Dehumidified Dryer		h	3-4
Drying Temperature		°C (°F)	110 (230)
Processing Moisture Content		%	<0.05

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