

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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The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights. DuPont advises you to seek independent counsel for a freedom to practice opinion on the intended application or end-use of our products. Caution: Do not use this product in medical applications involving permanent implantation in the human body.

For other medical applications see "DuPont Medical Caution Statement", H-50102.

Hytre[®] DYM250S BK472

Property	Test Method	Units	Value
Thermal			
Deflection Temperature 0.45MPa	ISO 75f	°C (°F)	50 (122)
1.80MPa			40 (104)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	222 (432)
Vicat Softening Temperature 10N, 50°C/h	ISO 306	°C (°F)	150 (302)
Rheological			
Melt Mass-Flow Rate 240°C, 2.16kg	ISO 1133	g/10 min	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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