

Product Texts

Common features of Hytrel® thermoplastic polyester elastomer include mechanical and physical properties such as exceptional toughness and resilience, high resistance to creep, impact and flex fatigue, flexibility at low temperatures and good retention of properties at elevated temperatures. In addition, it resists many industrial chemicals, oils and solvents. Special grades include heat stabilised, flame retardant, food contact compliant, blow molding and extrusion grades. Concentrates offered include black pigments, UV protection additives, heat stabilisers, and flame retardants.

Hytrel® thermoplastic polyester elastomer is plasticiser free.

The good melt stability of Hytrel® thermoplastic polyester elastomer normally enables the recycling of properly handled production waste. If recycling is not possible, we recommend, as the preferred option, incineration with energy recovery (-24 kJ/g of base polymer) in appropriately equipped installations.

For disposal, local regulations have to be observed.

Hytrel® thermoplastic polyester elastomer typically is used in demanding applications in the automotive, fluid power, electrical/electronic, consumer goods, appliance and power tool, sporting goods, furniture, industrial and off-road transportation/equipment industry.

Hytrel® HTR8724 BK320 is a heat stable, plasticiser-free, high viscosity thermoplastic polyester elastomer designed for extrusion and blow molding processes. It has been developed for demanding applications such as automotive jounce bumpers.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.9	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.7	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	110	MPa	ISO 527
^[C] Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	120	kJ/m ²	ISO 179/1eA
^[C] Stress at 10% elongation	8	MPa	ISO 527
^[C] Stress at 100% elongation	18	MPa	ISO 527
^[C] Stress at 300% elongation	29	MPa	ISO 527
^[C] Stress at break TPE	30	MPa	ISO 527
^[C] Strain at break TPE	>300	%	ISO 527
^[C] Shore D hardness	44	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	206	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	-40	°C	ISO 11357-1/-2
^[C] Coeff. of linear therm. expansion, parallel	220	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	190	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Water absorption	0.5	%	Sim. to ISO 62
^[C] Density	1160	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Profile Extrusion, Other Extrusion, Blow Molding

Delivery form

Pellets, Black

Special Characteristics

Light stabilized or stable to light, Heat stabilized or stable to heat

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific, South and Central America