

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® HTR237BG is designed for blow molding or processing techniques requiring high viscosity. It has nominal durometer hardness of 45D, is pigmented black with fine particle size carbon black and contains a general purpose stabilizer.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Density of melt	990	kg/m ³	-
^[C] Thermal conductivity of melt	0.23	W/(m K)	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Charpy notched impact strength, +23°C	N	kJ/m ²	ISO 179/1eA
^[C] Stress at 10% elongation	7.6	MPa	ISO 527
^[C] Stress at 100% elongation	15	MPa	ISO 527
^[C] Stress at 300% elongation	26	MPa	ISO 527
^[C] Stress at break TPE	30	MPa	ISO 527
^[C] Strain at break TPE	>300	%	ISO 527
^[C] Shore D hardness	41	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	204	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	-45	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	41	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	57	°C	ISO 75-1/-2
^[C] Coeff. of linear therm. expansion, parallel	210	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	200	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1150	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Blow Molding

Delivery form

Pellets, Black

Special Characteristics

Heat stabilized or stable to heat

Regional Availability

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