

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® HTR8813 BK320 is a medium hardness halogen-free flame retarded thermoplastic elastomer with very good flammability performance. It can be processed by thermoplastic techniques such as injection molding and extrusion.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	1.2	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	1.2	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	450	MPa	ISO 527
^[C] Charpy notched impact strength, -30°C	2.5	kJ/m ²	ISO 179/1eA
^[C] Stress at 10% elongation	11	MPa	ISO 527
^[C] Stress at 100% elongation	12	MPa	ISO 527
^[C] Stress at break TPE	11	MPa	ISO 527
^[C] Strain at break TPE	150	%	ISO 527
^[C] Shore D hardness	55	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	200	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	-30	°C	ISO 11357-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Yellow Card available	yes	-	-
^[C] Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
^[C] Oxygen index	49	%	ISO 4589-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1230	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion

Special Characteristics

Flame retardant, Halogen-free

Delivery form

Pellets, Black

Regional Availability

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