Hytrel® HTR4275 BK600

TPC | Celanese

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® HTR4275 BK600 is designed for blow molding or processing techniques requiring high melt viscosity. It has nominal hardness of 55D, is pigmented black and formulated for superior UV resistance.

Typical applications:

Hollow thin wall parts requiring a tough polymer with excellent flexibility and temperature properties such as automotive boots.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.7**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**2.1**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**165**	MPa	ISO 527
[C] Stress at 10% elongation	**11**	MPa	ISO 527
[C] Stress at break TPE	**36**	MPa	ISO 527
[C] Strain at break TPE	**>300**	%	ISO 527
[C] Shore D hardness	**50**	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**191**	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**-30**	°C	ISO 11357-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1170**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion, Blow Molding, Thermoforming

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Delivery form

Pellets, Black

Regional Availability

Asia Pacific

Other text information

Blow molding

Molding shrinkage

Copyright Altair Engineering GmbH. Altair Engineering GmbH assumes no liability for the system to be free of errors. The user takes sole responsibility for the use of this data under the exclusion of every liability from Altair Engineering GmbH; this is especially valid for claims of compensation resulting from consequential damages. Altair explicitly points out that any decision about the application of materials must be double checked with the producer of this material. This includes all contents of this system. Copyright laws are applicable for the content of this system.

Normal, 1.0mm Blow Molded = 2.2-2.7 %
Parallel 1.0mm Blow Molded = 1.5-2.0 %

Copyright Altair Engineering GmbH. Altair Engineering GmbH assumes no liability for the system to be free of errors. The user takes sole responsibility for the use of this data under the exclusion of every liability from Altair Engineering GmbH; this is especially valid for claims of compensation resulting from consequential damages. Altair explicitly points out that any decision about the application of materials must be double checked with the producer of this material. This includes all contents of this system. Copyright laws are applicable for the content of this system.