# Hytrel® HTR8441 BK316

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® HTR8441 is a 55 nom. Shore D thermoplastic polyester elastomer for blow molding and extrusion. It provides good mechanical properties at high temperature.**

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melt volume-flow rate, MVR | **9** | cm³/10min | ISO 1133 |
| Temperature | **240** | °C | - |
| Load | **10** | kg | - |
| [C] Molding shrinkage, parallel | **2.2** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **2.1** | % | ISO 294-4, 2577 |
| [C] Density of melt | **1010** | kg/m³ | - |
| [C] Thermal conductivity of melt | **0.16** | W/(m K) | - |
| [C] Spec. heat capacity of melt | **2150** | J/(kg K) | - |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **190** | MPa | ISO 527 |
| [C] Charpy impact strength, +23°C | **N** | kJ/m² | ISO 179/1eU |
| [C] Charpy notched impact strength, +23°C | **N** | kJ/m² | ISO 179/1eA |
| [C] Charpy notched impact strength, -30°C | **39** | kJ/m² | ISO 179/1eA |
| [C] Tensile notched impact strength, +23°C | **330** | kJ/m² | ISO 8256/1 |
| [C] Stress at 10% elongation | **13** | MPa | ISO 527 |
| [C] Stress at break TPE | **38** | MPa | ISO 527 |
| [C] Strain at break TPE | **>300** | % | ISO 527 |
| [C] Shore D hardness | **52** | - | ISO 7619-1 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melting temperature, 10°C/min | **214** | °C | ISO 11357-1/-3 |
| [C] Glass transition temperature, 10°C/min | **-40** | °C | ISO 11357-1/-2 |
| [C] Burning rate, FMVSS, Thickness 1 mm | **42** | mm/min | ISO 3795 (FMVSS 302) |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| [C] Density | **1190** | kg/m³ | ISO 1183 |

[C]: CAMPUS

## Characteristics

**Processing**
Profile Extrusion, Other Extrusion, Blow Molding

**Special Characteristics**
Heat stabilized or stable to heat

**Delivery form**
Pellets, Black

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America