# Hytrel® HTR8745 BK320

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 moulding 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® HTR8745 BK320 is designed for blow molding or processing techniques requiring high melt viscosity. It has nominal 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] Molding shrinkage, parallel | **1.6** | % | ISO 294-4, 2577 |
| [C] Molding shrinkage, normal | **1.5** | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **94** | MPa | ISO 527 |
| [C] Charpy notched impact strength, -30°C | **N** | kJ/m² | ISO 179/1eA |
| [C] Stress at 10% elongation | **7.7** | MPa | ISO 527 |
| [C] Stress at break TPE | **34** | MPa | ISO 527 |
| [C] Strain at break TPE | **>300** | % | ISO 527 |
| [C] Shore D hardness | **40** | - | ISO 7619-1 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melting temperature, 10°C/min | **203** | °C | ISO 11357-1/-3 |
| [C] Glass transition temperature, 10°C/min | **-45** | °C | ISO 11357-1/-2 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| [C] Density | **1140** | kg/m³ | ISO 1183 |

[C]: CAMPUS

## Characteristics

**Processing**

Profile Extrusion, Sheet Extrusion, Other Extrusion, Coating, Blow Molding

**Special Characteristics**

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

**Delivery form**

Pellets, Black

**Regional Availability**

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