

**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® 3046 NC010 is a high performance thermoplastic elastomer, with excellent flexibility and impact strength at temperature as low as - 40 °C, and significant strength and integrity above 110 °C without the use of plasticizers. It has excellent flex crack resistance, as well as resistance to tear, wear, impact, stress relaxation and creep; good hydrocarbon resistance.**

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Stress at 10% elongation	<b>1.9</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break TPE	<b>20</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break TPE	<b>&gt;300</b>	%	ISO 527
<sup>[C]</sup> Shore D hardness	<b>25</b>	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>168</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Burning rate, FMVSS, Thickness 1 mm	<b>41</b>	mm/min	ISO 3795 (FMVSS 302)

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Humidity absorption	<b>0.2</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1070</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding, Film Extrusion, Sheet Extrusion

**Delivery form**

Pellets, Natural Color

**Special Characteristics**

Light stabilized or stable to light

**Features**

Creep Resistance

**Chemical Resistance**

Environmental Stress Crack Resistance

**Regional Availability**

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