Hytrel® 6356BKB

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® 6356BKB is a medium modulus grade with nominal hardness of 63D. It is a cube blend of Hytrel® 6356 and Hytrel® 40CB. It contains non-discoloring stabilizer. It can be processed by many conventional thermoplastic processing techniques like injection molding and extrusion.

Typical applications:
Hose and tubing, mandrels, wire and cable, film, profiles, seals, gears, sprockets, fuel tanks, containers with good permeation resistance to gases and liquids.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**8.5**	cm³/10min	ISO 1133
Temperature	**230**	°C	-
Load	**2.16**	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**280**	MPa	ISO 527
[C] Charpy notched impact strength, +23°C	**120**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**25**	kJ/m²	ISO 179/1eA
[C] Stress at break TPE	**43**	MPa	ISO 527
[C] Strain at break TPE	**>300**	%	ISO 527

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**210**	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**-5**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**45**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**80**	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
[C] Density	**1220**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Casting, Thermoforming

Delivery form
Pellets, Black

Features
Color Stability

Regional Availability
Asia Pacific

Special Characteristics
Light stabilized or stable to light