



Purell PE GF 4760

Polyethylene, High Density

Product Description

Purell PE GF 4760 is a high density polyethylene with good ESCR, high rigidity and good organoleptic properties. It contains antioxidants and is delivered in pellet form. The grade is used by our customers for small blow mouldings for foodstuff, consumer goods as well as pharmaceutical packaging. This grade is also well established for injection blow moulding applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Methods	Extrusion Blow Molding, Injection Blow Molding, Injection Molding
Features	Antioxidant, Ethylene Oxide Sterilisation, Good Flow, Good Organoleptic Properties, High Rigidity
Typical Customer Applications	Bottles and vials, Diagnostic applications, Healthcare Applications, Medical Devices

Typical Properties	Method	Value	Unit
Physical			
Density	ISO 1183	0.956	g/cm ³
Melt flow rate (MFR)	ISO 1133		
(190°C/2.16kg)		0.4	g/10 min
(190°C/21.6kg)		30	g/10 min
(190°C/5.0kg)		1.5	g/10 min
Bulk density	ISO 60	>0.500	g/cm ³
Mechanical			
Tensile Modulus	ISO 527-1, -2	1250	MPa
Tensile Stress at Yield	ISO 527-1, -2	27.0	MPa
Tensile Strain at Yield	ISO 527-1, -2	10	%
Tensile Impact Strength	ISO 8256	90	kJ/m ²
<i>Note: notched</i>			
Impact			
Charpy notched impact strength (-30 °C, Type 1, Notch A)	ISO 179	8.00	kJ/m ²
Hardness			
Shore hardness (Shore D)	ISO 868	62	
Ball indentation hardness (H 132/30)	ISO 2039-1	51.0	MPa
Thermal			
Vicat softening temperature (B50 (50°C/h 50N))	ISO 306	77.0	°C

Additional Properties

Staudinger Index Jg, ISO 1628: 280 ml/g
 FNCT: 2.5 MPa, 2% Arcopal, 80°C, ISO 16770: 15 h
 FNCT: 3.5 MPa, 2% Arcopal, 80°C, ISO 16770: 5 h
 ESCR - Basell bottle test: 30 h

Recommended processing temperatures: 170°C to 220°C.

Notes

Typical properties; not to be construed as specifications.