

Technical Data Sheet

Purell PE GF 4750

High Density Polyethylene



Product Description

Purell PE GF4750 is a high density polyethylene with a good ESCR, containing antioxidants and delivered in pellet form. The grade is used by our customers for small blow mouldings and tubes for packaging of consumer goods, surfactants, detergents as well as pharmaceuticals.

Application	Bottles and Vials; Caps & Closures; Caps & Closures (Healthcare); Collapsible Tubes; Collapsible Tubes (Healthcare); Diagnostic Applications; Healthcare Applications; Medical Film
Market	Consumer Products; Flexible Packaging; Healthcare; Rigid Packaging
Processing Method	Blown Film; Extrusion Blow Molding; Injection Blow Molding; Injection Molding
Attribute	Antioxidant; Ethylene Oxide Sterilisation; Good Flow; High ESCR (Environmental Stress Cracking Resistance)

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/2.16 kg)	0.4	g/10 min	ISO 1133-1
(190 °C/5.0 kg)	1.5	g/10 min	ISO 1133-1
(190 °C/21.6 kg)	30	g/10 min	ISO 1133-1
Density	0.950	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	1000	MPa	ISO 527-1, -2
Tensile Stress at Yield	23.0	MPa	ISO 527-1, -2
Tensile Strain at Yield	10	%	ISO 527-1, -2
FNCT			
(6.0 MPa, 2% Arkopal N100, 50 °C)	65	hr	ISO 16770
(4.0 MPa, 2% Arkopal N100, 80 °C)	9	hr	ISO 16770
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Notch A)	12.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.5	kJ/m ²	ISO 179
Hardness			
Shore Hardness, (Shore D)	60		ISO 868
Ball Indentation Hardness, (H 132/30)	44	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (B50)	70	°C	ISO 306

