



Purell ACP 5231 D

Polyethylene, High Density

Product Description

Purell ACP 5231 D is a high density polyethylene with an excellent combination of stress crack resistance and stiffness. It is delivered in pellet form containing antioxidants and used by our customers for small blow moulding applications in the healthcare and diagnostics segment.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Method	Injection Blow Molding, Injection Molding, Extrusion Blow Molding
Features	Antioxidant, High ESCR (Environmental Stress Cracking Resistance), High Rigidity, Ethyleneoxide sterilisation
Typical Customer Applications	Medical Devices, Collapsible Tubes, Bottles and vials, Diagnostic applications, Caps & Closures (Healthcare), Collapsible Tubes (Healthcare), Healthcare Applications

Typical Properties	Method	Value Unit
Physical		
Density	ISO 1183	0.952 g/cm ³
Melt flow rate (MFR)	ISO 1133	
(190°C/2.16kg)		0.30 g/10 min
(190°C/21.6kg)		23 g/10 min
(190°C/5.0kg)		1.2 g/10 min
Bulk density	ISO 60	>0.500 g/cm ³
Mechanical		
Tensile Modulus	ISO 527-1, -2	1100 MPa
Tensile Stress at Yield	ISO 527-1, -2	25 MPa
Tensile Strain at Yield	ISO 527-1, -2	8 %
Tensile Impact Strength	ISO 8256	77 kJ/m ²
<i>Note: notched</i>		
Impact		
Charpy notched impact strength (-30 °C, Type 1, Notch A)	ISO 179	5,0 kJ/m ²
Hardness		
Shore hardness (Shore D)	ISO 868	68
Ball indentation hardness (H 132/30)	ISO 2039-1	37 MPa

Additional Properties

FNCT: 3,5 MPa, 2% Arcopal, 80°C, ISO 16770 30 h

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

Notes

Typical properties; not to be construed as specifications.