Braskem

Datasheet
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High Density Polyethylene GD5150K

Description:

GD5150K is a High Density Polyethylene, with medium molar mass, specially developed for the manufacturing of insulation for wires and cables demanding high extrusion velocity. It has medium molar mass, shows good dielectric properties and contains special additives to prevent catalytic oxidation of copper.

Applications:

Multiplexed cables, Wire insulation

Processes:

Wire and Cable Extrusion

Control Properties:

Feature	Method	Units	Values
Melt Flow Rate (190°C/2.16kg)	D 1238	g/10 min	0.83
Density	D 792	g/cm³	0.946

Typical Properties - Plaque[1]:

Plaque Properties

Feature	Method	Units	Values
Tensile Strength at Yield (a)	ASTM D 638	MPa	23
Elongation at Yield (a)	D 638	%	11
Tensile Strength at Break (a)	D 638	MPa	28
Elongation at Break (a)	D 638	%	980
Flexural Modulus - 2% Secant (b)	D 2240	-	950
Hardness (c)	D 1693	h/F50	63
Izod Impact Strength (b)	D 256	J/m	65
Environmental Stress Cracking Resistance - notch 0,3 mm; 50°C; 100% Igepal CO630 (a)	ASTM D 1693	h/F50	139
Deflection Temperature under Load at 0.455 MPa (b)	D 648	ºC	69
Vicat Softening Temperature at 10 N (b)	D 1525	°C	121
Relative Dielectric Constant, 1 KHz	D 150	-	2.3
Dissipation Factor, 1 KHz	D 150	-	0.0006
Dielectric Strength	D 149	kV/mm	40
Volume Resistivity	D 257	ohm.cm	> 1x10^15

[1] Test specimens from compression molded plaque according to ASTM D4703. Plaque Thickness: a) 2mm. b) 3mm c) 6mm. NB = No break.

Final Remarks

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