

POLIMAXX P702BK

IRPC Public Company Limited - High Density Polyethylene

General Information

Product Description

POLIMAXX P702BK is special jacket compound produced from High-Density Polyethylene used for sheath of optical fiber cable.

POLIMAXX P702BK is special compound for the purpose of extruding wire and cable jacket, providing abrasion resistance, stress-cracking resistance and easy process ability.

POLIMAXX P702BK contains necessary additives designed especially for extrusion process. Thus, it will provide excellent UV and weathering resistance.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Abrasion Resistant	• Good Processability	• High Density
	• Good ESCR (Stress Crack Resist.)	• Good Weather Resistance	• UV Resistant
Uses	• Fiber Optic Cable Jacketing	• Wire & Cable Applications	
Processing Method	• Extrusion		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.968	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	1.5	g/10 min	ISO 1133
Molding Shrinkage	1.5 to 2.5	%	ISO 294-4
Environmental Stress-Cracking Resistance (ESCR)	> 5000	hr	ASTM D1693
Carbon Black Content	2.6	wt%	ISO 6964
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Yield)	4350	psi	ISO 527-2
Tensile Strain (Break)	700	%	ISO 527-2
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	63		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	262	°F	ASTM D1525
Peak Melting Temperature ²	266 to 275	°F	ASTM D3418
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	5.0E+16	ohms·cm	ASTM D257
Dielectric Constant (1 MHz)	2.53		ASTM D150
Dissipation Factor	2.4E-3		ASTM D150

Processing Information

Extrusion	Nominal Value	Unit
Drying Temperature	176 to 185	°F
Drying Time	1.0 to 2.0	hr
Melt Temperature	356 to 428	°F

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

