

Alathon® M5370RF

High Density Polyethylene
LyondellBasell Industries

Message:

ALATHON® M5370RF is a natural, high density polyethylene copolymer resin designed for high-frequency coaxial and control cable primary insulation. Alathon M5370RF achieves a low dissipation factor at high frequencies, and provides high impact strength, stress crack resistance, excellent color, and good processability.
For optimal performance in foamed insulation, Alathon M5370RF should be blended with Petrothene® NA217080 and a nucleating package.

General Information			
Features	High ESCR (Stress Cracking Resistance)		
	Impact resistance, high		
	Workability, good		
Uses	Wire and cable applications		
	Insulating material		
Appearance	Natural color		
Physical	Nominal Value	Unit	Test Method
Density	0.953	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	7.3	g/10 min	ASTM D1238
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	67		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Yield	25.5	MPa	ASTM D638
Fracture	24.1	MPa	ASTM D638
Tensile Elongation (Break)	1700	%	ASTM D638
Flexural Modulus - 1% Secant	1280	MPa	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -76.0	°C	ASTM D746
Vicat Softening Temperature	124	°C	ASTM D1525
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+17	ohms · cm	ASTM D257
Dielectric Strength	28	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	2.34		ASTM D1531
Dissipation Factor (1 MHz)	2.0E-5		ASTM D1531
Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	300 - 325	°C	
Cylinder Zone 2 Temp.	350 - 400	°C	

Cylinder Zone 3 Temp.	400 - 450	°C
Cylinder Zone 4 Temp.	475 - 500	°C
Cylinder Zone 5 Temp.	475 - 500	°C
Adapter Temperature	475 - 500	°C
Melt Temperature	475 - 500	°C
Die Temperature	475 - 500	°C

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Recommended distributors for this material

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