

## LyondellBasell Alathon® M5370WC High Density Polyethylene

Category: Polymer, Thermoplastic, Polyethylene (PE), HDPE, High Density Polyethylene (HDPE), Extruded

## **Material Notes:**

ApplicationsALATHON M 5370WC is a natural, high density, polyethylene copolymer resin with a narrow molecular weight distribution formulated for use as primary insulation for coaxial and control cable applications including gas-injected or chemically expanded insulation. M 5370WC provides high impact strength and stress crack resistance, excellent color, low odor and good processability. Processing TechniquesM 5370WC, like other thermoplastic polyolefin resins, can be extruded as wire and cable insulation using a conventional extruder. Below are suggested extrusion conditions for M 5370WC. These conditions are intended as general guidelines only and are not optimum values, since manufacturing conditions such as extruder type and size affect the processing of thermoplastic resins. This product is from the former Equistar product line.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_LyondellBasell-Alathon-M5370WC-High-Density-Polyethylene.php

Physical Properties	Metric	English	Comments
Density	0.953 g/cc	0.0344 lb/in³	ASTM D1505
Melt Flow	7.0 g/10 min	7.0 g/10 min	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	67	67	ASTM D2240
Tensile Strength at Break	24.1 MPa	3500 psi	ASTM D638
Tensile Strength, Yield	25.5 MPa	3700 psi	ASTM D638
Elongation at Break	1700 %	1700 %	ASTM D638

Thermal Properties	Metric	English	Comments
Vicat Softening Point	124 °C	255 °F	ASTM D1525
Brittleness Temperature	<= -76.0 °C	<= -105 °F	F <sub>50</sub> ; ASTM D746

Electrical Properties	Metric	English	Comments
Electrical Resistivity	4.00e+17 ohm-cm	4.00e+17 ohm-cm	ASTM D257
Dielectric Constant	2.34	2.34	ASTM D1531
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	27.6 kV/mm	700 kV/in	DC; ASTM D149
Dissipation Factor	0.000020	0.000020	ASTM D1531
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	



Electrical Properties	Metric 20	English o	Comments
	@Frequency 2.00e+9 Hz	@Frequency 2.00e+9 Hz	ASTM D1531

Processing Properties	Metric	English	Comments
Feed Temperature	149 - 163 °C	300 - 325 °F	
Zone 2	177 - 204 °C	350 - 400 °F	
Zone 3	204 - 232 °C	400 - 450 °F	
Zone 4-x	246 - 260 °C	475 - 500 °F	
Adapter Temperature	246 - 260 °C	475 - 500 °F	
Die Temperature	246 - 260 °C	475 - 500 °F	
Melt Temperature	246 - 260 °C	475 - 500 °F	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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