

## Borealis Borcell™ HE1102 High Density Polyethylene Compound for Gas Injection of Cellular Communication Cable Insulation

Category: Polymer, Thermoplastic, Polyethylene (PE), HDPE

## **Material Notes:**

Borcell HE1102 is a high density polyethylene. A nucleating agent is incorporated for a uniform and closed cell structure. The components in the formulation are selected to give the lowest possible dielectric loss. Borcell HE1102 HDPE is intended for the insulation of communication cables using a gas-injection foaming process. Borcell HE1102 is suitable for thick walled coax cables, minicoax cables and telephone signals. With proper processing conditions it is possible to produce coax cables with an expansion degree of 75%. Information provided by the Manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer\_Borealis-Borcell-HE1102-High-Density-Polyethylene-Compound-for-Gas-Injection-of-Cellular-Communication-Cable-Insulation.php

Physical Properties	Metric	English	Comments
Density	0.948 g/cc	0.0342 lb/in³	ASTM D792
Melt Flow	0.50 g/10 min	0.50 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	61	61	ASTM D2240
Tensile Strength, Yield	24.8 MPa	3600 psi	ASTM D638
Elongation at Break	200 %	200 %	ASTM D638

Thermal Properties	Metric	English	Comments
Brittleness Temperature	<= -76.0 °C	<= -105 °F	ASTM D746

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+16 ohm-cm	1.00e+16 ohm-cm	ASTM D257
Dielectric Constant	2.35	2.35	ASTM D1531
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Dielectric Strength	>= 27.6 kV/mm	>= 700 kV/in	At 20 mils; ASTM D3755
Dissipation Factor	0.000050	0.000050	ASTM D1531
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	



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

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China