Polyethylene
LE6022
Black Low Density Copolymer Modified Polyethylene Jacketing Compound for Communication Cables

Description
LE6022 is a black low density copolymer modified polyethylene compound. It is characterized by excellent stress crack resistance and mechanical properties and low temperature performance in combination with good extrudability. LE6022 contains 2,5% well dispersed furnace black in order to ensure excellent weathering resistance.

Applications
LE6022 is designed for jacketing of communication cables.

Specifications
LE6022 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

ASTM D 1248 Type I, Class C, Category 5, Grade E5, J3, W2-4

ISO 1872-PE, KCHL, 18-D003

The following cable material standards are met by LE6022:

EN 50290-2-24

DIN VDE 0207 Type 2YM2

Cables manufactured with LE6022 using sound extrusion practice normally comply with the following cable product standards:

IEC 60502, Part 2, Type ST3
IEC 60708
IEC 60840, Type ST3

HD 620 S2, Part 1, table 4B, DMP 17

Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density (Base Resin)	918 kg/m³	ISO 1183-1, Method A
Density (Compound)	931 kg/m³	ISO 1183-1, Method A
Bulk density	500 - 600 kg/m³	
Melt Flow Rate (190 °C/2,16 kg)	0,2 g/10min	ISO 1133-1, Method A
Flexural Modulus	250 MPa	ISO 178
Tensile Strain at Break (50 mm/min)	> 600 %	ISO 527-2
Tensile Strength (50 mm/min)	> 15 MPa	ISO 527-2
Absorption coefficient (abs/m)	400	ASTM D3349
Brittleness temperature	< -76 °C	ASTM D 746
Environmental Stress Crack Resistance (50 °C, Igepal 10 %, F20)	> 1.000 h	IEC 60811-406
Hardness, Shore D (1 s)	50	ISO 868

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Electrical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Dielectric constant (1 MHz)	2,5	IEC 60250
DC Volume Resistivity	10 PΩcm	IEC 60093
Dielectric Strength	20 kV/mm	IEC 60243
Dissipation Factor (1 MHz)	0,006	IEC 60250

Processing Techniques

 LE6022 provides excellent surface finish and high output rates over a broad range of conditions. For normal extrusion equipments and applications we suggest a melt temperature and a conductor preheating according to the table below:

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borealis representative for such particulars.

Extrusion
Melt temperature   200 - 210 °C

Packaging

Package: Bags
                    Octabins
                    Bulk

Safety
The product is not classified as dangerous and is intended for industrial use only. Check and follow local codes and regulations!\'20 Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety, recovery and disposal of the product. For more information, contact your Borealis representative.

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