



Black LDPE Jacketing Compound

- Description**

ZARPLS™ HDB8707 is a black low density copolymer modified polyethylene compounds. It is characterized by excellent stress crack resistance and mechanical properties and low-temperature performance in combination with good extrudability. ZARPLS™ HDB8707 contains 2.5% well-dispersed carbon black in order to ensure excellent weathering resistance

- Applications**

ZARPLS™ HDB8707 is designed for: Jacket for energy and communication cables . The physical toughness and very low water permeability of the compound make it an ideal solution especially for buried power cables. ZARPLS™ HDB8707 offers a balance of properties giving advantages in manufacturing, installation and lifetime performance of energy and communication cables.

- Specifications**

ZARPLS™ HDB8707 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 J3, E5, W2-4
- BS 6234: Type 03C, TS1
- BT M 132
- DIN VDE 0207 Type 2YM2
- EN 50290-2-24
- HD 620 S1, Part 1, table 4B, DMP 17
- IEC 60502, Type ST3
- IEC 60708
- IEC 60840, ST3
- ISO 1872-PE, KCHL, 18-D003
- NF C 32-060

- Physical Properties**

Data should not be used for specification work

Property	Typical Value	Test Method
Density (Base Resin)	0.92 gr/cm ³	ISO 1183
Density (Compound)	0.93 gr/cm ³	ISO 1183
Melt Flow rate (190°C , 2.16 kg)	0.2 gr/10 min	ISO 1133

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Elongation at Break (250 mm/min)	500 %	IEC 60811-401
Tensile Strength (250 mm/min)	14 N/mm ²	IEC 60811-401
Hardness Shore D (1s)	50	ISO 868
Brittleness Temperature	< 76°C	ASTM D746

- Electrical Properties**

Data should not be used for specification work

Property	Typical Value	Test Method
Dielectric Constant (1MHz)	2.5	IEC 60250
Dissipation Factor (1MHz)	0.006	IEC 60250
DC Volume Resistivity	10 ¹⁶ Ohm.com	IEC 60093
Dielectric Strength	20 kV/mm	IEC 60243

- Processing Techniques**

ZARPLS™ HDB8707 provides excellent surface finish and high output rates over a broad range of conditions. For normal extrusion equipment's and applications we suggest a melt temperature and a conductor preheating according to the table below:

Conductor Preheating Temperature: 80 - 100 °C

Melt Temperature: 200 - 210 °C

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.

- Packaging**

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