



Black LDPE Jacketing Compound

- Description**

ZARPLS™ LDB7620 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™ LDB7620 contains 2.5% well-dispersed carbon black in order to ensure excellent weathering resistance

- Applications**

ZARPLS™ LDB7620 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™ LDB7620 offers a balance of properties giving advantages in manufacturing, installation and lifetime performance of energy and communication cables.

- Specifications**

ZARPLS™ LDB7620 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/cm3	ISO 1183
Density (Compound)	0.93 gr/cm3	ISO 1183
Carbon Black Content	2.5 +/- 0.3 %	ASTM D1603
Carbon Black Dispersion (Photomicrographs for evaluation)	A1 , A2	ISO 18553
Carbon Black Dispersion (grading of particles , agglomerates)	Max 2.5	ISO 18553
Melt Flow rate (190°C , 2.16 kg)	0.6 gr/10 min	ISO 1133
Elongation at Break (50 mm/min)	500 %	IEC 60811-401
Tensile Strength (50 mm/min)	14 N/mm2	IEC 60811-401
Retention of mechanical properties after 48 hours and 100°C	Min 90%	IEC 60811-401





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Hardness Shore D (1s)	50	ISO 868
Brittleness Temperature	< -76°C	ASTM D746
ESCR (50°C, 10% Igepal), F20	>500h	IEC 60811-4-1/B
O.I.T (Oxidative Induction Time) @200°C	> 35 minutes	ASTM D3895

• 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.cm	IEC 60093
Dielectric Strength	20 kV/mm	IEC 60243

• Processing Techniques

ZARPLS™ HDB7620 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:

Feed section: 170°C

Metering section: 200°C

Head and die 210° C

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. If preheating and/or drying is used, the maximum temperature should be 90°C.

• Packaging

Big-Bags (from 500 to 1200 kg)

Tetrabin (500 kg – 1200 kg)

Bags (25 kg ; 55 bags on one pallet , 1375 kg on each pallet)

• Safety

The product is not classified as a dangerous preparation and is intended for industrial use only.

Check and follow local codes and regulations!

Please see our Safety Data Sheet for details on various aspects of safety of the product, for more information contact ZARPOLMER.

