



Black HDPE Jacketing Compound

- **Description**

ZARPLS™ HDB6062 is a black high density (HD) jacketing compound. ZARPLS technology allows the manufacturing of polymers outside the traditional MFR and density range making it possible to optimize Processibility, reduce shrinkage and yet provide excellent physical toughness and environmental stress crack resistance (ESCR).

ZARPLS™ HDB6062 contains 2.5% well-dispersed carbon black in order to ensure excellent weathering resistance

- **Applications**

ZARPLS™ HDB6062 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™ HDB6062 offers a balance of properties giving advantages in manufacturing, installation and lifetime performance of energy and communication cables.

- **Specifications**

ZARPLS™ HDB6062 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

ASTM D 1248 Type III, Class C, Category 4, Grade E8, E9, J4, W8,9
BS 6234: Type H03C, TS2
DIN VDE 0207, Type 2YM3
DIN 57818/VDE 0818
EN 50290-2-24 BSI 6622
HD 620 S1, Part 1, table 4B, DMP 2, 8-12, 14, 15
IEC 60502, Type ST7
IEC 60708
IEC 60840, Type ST7
ISO 1872-PE, KCHL, 45 D-006
NF C32-060

- **Special features**

ZARPLS™ HDB6062 consists of specially selected components to offer:

Superior Processibility
Excellent environmental stress cracking resistance (ESCR)
Excellent abrasion & scratch resistance
Low water permeability

Outstanding UV resistance
Low shrinkage
Excellent surface hardness
Low heat deformation

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- Physical Properties**

Data should not be used for specification work

Property	Typical Value	Test Method
Density (Base Resin)	0.94 gr/cm ³	ISO 1183
Density (Compound)	0.95 gr/cm ³	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)	0.45 g/10 min	ISO 1133
Melt Flow rate (190°C , 5 kg)	1.6 gr/10 min	ISO 1133
Elongation at Break (250 mm/min)	500 %	IEC 60811-401
Tensile Strength (250 mm/min)	25 N/mm ²	IEC 60811-401
Hardness Shore D (1s)	55	ISO 868
Hardness Shore D (3s)	50	DIN 53505
Pressure Test at High Temperature (115°C)	< 50 %	IEC 60811-3-1
O.I.T (Oxidative Induction Time) @200°C	> 35 minutes	ASTM D3895
ESCR , 50°C , 10% Igepal , F0	>1000 h	ASTM D 1693

- Electrical Properties**

Data should not be used for specification work

Property	Typical Value	Test Method
DC Volume Resistivity	10 P.Ohm.com	IEC 60093
Dielectric Strength	>20 kV/mm	IEC 60243

- Processing Techniques**

ZARPLS™ HDB6062 provides excellent surface finish and allows a broad processing window. ZARPLS™ HDB6062 is suitable for most equipment designed for PVC/PE extrusion. To minimize shrink back gradient cooling with hot water, minimum 60°C in the first part of the cooling trough, is strongly recommended.

- Extrusion**

If preheating and/or drying is used, the maximum temperature should be 90°C.

Preheating

90 °C

Maximum recommended temperature



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Melt temperature	180 - 190 °C	
Cooling water	60 °C	First part of cooling trough

- **Packaging**

- Big-Bags (from 500 to 1200 kg)
- Octabins (Max 600 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.