



### Natural HDPE Insulation Compound – Telecom wire and cables

- **Description**

ZARPLS™ HDN3368 is a high density insulation compound designed for high extrusion speeds. HE3368 has very good flow properties and is especially designed to avoid excessive die head pressure. ZARPLS™ HDN3368 contains an enhanced stabilization system to meet the most demanding requirements

- **Applications**

ZARPLS™ HDN3368 is designed to meet most stringent standards for heat ageing, such as Telcordia Pedestal Test and has a special stabilizer package.

ZARPLS™ HDN3368 is also suitable as outer skin in “foam-skin” constructions.

- **Specifications**

ZARPLS™ HDN3368 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

- ASTM D 1248 Type III, Class A, Category 4, Grade E8, E9
- BS 6234: Type H03
- BT M 237
- DIN VDE 0207, 2Y11
- DIN VDE 0818
- EN 50288
- EN 50290-2-23
- IEC 60708
- ISO 1872-PE, KHN, 45-D006
- NF C 32-060
- REA Bulletin 345-21
- REA Bulletin 345-67
- Telcordia GR-421-CORE
- US MIL SPEC LP 390C, Type II, Class H, Grade 1, Category 4



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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 <sup>3</sup>	ISO 1183
Melt Flow rate (190°C , 2.16 kg)	0.8 gr/10 min	ISO 1133
Elongation at Break (250 mm/min)	500 %	IEC 60811-401
Tensile Strength (250 mm/min)	21 N/mm <sup>2</sup>	IEC 60811-401
Hardness Shore D (1s)	61	ISO 868
Oxygen Induction Time , 200°C	200 min	IEC 60811-4-2
ESCR (50°C , 10% Igepal) F20	>48 h	IEC 60811-4-1
Brittleness Temperature	< -76°C	ASTM D 746

- 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)	0.0006	IEC 60250
DC Volume Resistivity	10 <sup>16</sup> Ohm.com	IEC 60093
Dielectric Strength	20 kV/mm	IEC 60243

- Processing Techniques**

ZARPLS™ HDN3368 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 conductor preheating according to the table below:

Conductor preheating temperature: 100 - 120°C

Melt temperature 220 - 250°C

Cooling water temperature of the first part of the cooling trough: 50°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.





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- **Extrusion**

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

Preheating	90 °C	Maximum recommended temperature
Melt temperature	180 - 190 °C	
Cooling water	60 °C	First part of cooling trough

- **Packaging**

Octabin  
Bags

- **Safety**

ZARPLS™ HDN3368 is not classified as a dangerous preparation. The product is supplied in form of free-flowing granules of approximately 3 - 4 mm size and can be readily handled with commercially available equipment. Handling and transport of the product may generate some dust and fines, which constitute a potential hazard for dust explosion. All metal parts in the system should therefore be properly grounded.

Properly designed equipment and good housekeeping will reduce the risk.

Check and follow local codes and regulations!

Inhalation of any type of dust should be avoided as it may cause irritation of the respiratory system.

The product is intended for industrial use only. Please see our Safety Data Sheet for details on various aspects of safety of the product, for more information contact ZARPOLMER.