



Polyethylene BorcellTM HE4873

Compound for Cellular insulation of Communication cables

Description

Borcell HE4873 -

It is a fully formulated compound for physical foamed data cable insulation. Borcell HE4873 is a high-density polyethylene compound containing blowing agent for the production of foam or foam-skin insulation.

Applications

Borcell HE4873 is designed to use as physically foamed insulation for:

Data cables

Specifications

Borcell HE4873 meets the following material classification:

ISO 1872-PE, KEGHN, 45-D045

ASTM D1248 Type III, Class A, Category 3, Grade E1, E3

The following cable material standards are met by Borcell HE4873:

EN 50290-2-23¹

¹ Appropriate parts

Cables manufactured with Borcell HE4873 using sound extrusion practice normally comply with the following cable product standards:

IEC 61156

EN 50288

Special features

Borcell HE4873 consists of specially selected components to offer:

- Optimal cell structure
- Smooth surface
- Low plate out
- Easy extrusion
- High process control
- Improved crushability

Borcell is a trademark of Borealis A/S, Denmark.

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Polyethylene

Borcell HE4873

Physical Properties

| Property | Typical Value | Test Method |
|--|-----------------------|---------------------|
| Data should not be used for specification work | | |
| Density | 946 kg/m ³ | ISO 1872-2/ISO 1183 |
| Melt Flow Rate (140 °C/5 kg) | 3,8 g/10min | ISO 1133 |
| Tensile Strain at Break | 600 % | ISO 527 |
| Tensile Strength | 23 MPa | ISO 527 |
| Brittleness temperature | -76 °C | ASTM D 746 |
| Hardness, Shore D (1 s) | 61 | ISO 868 |

Processing Techniques

Borcell HE4873 can be processed over a wide range of conditions.

The construction, extruder size and setup of gas injection system are important in selecting proper processing conditions.

Extrusion

Typically the following process conditions are used:

| | | |
|----------|--------|-----------------------|
| Barrel 1 | 160 °C | Symmetric pair cables |
| Barrel 2 | 170 °C | Symmetric pair cables |
| Barrel 3 | 215 °C | Symmetric pair cables |
| Barrel 4 | 205 °C | Symmetric pair cables |
| Barrel 5 | 210 °C | Symmetric pair cables |
| Die | 220 °C | Symmetric pair cables |
| Head | 220 °C | Symmetric pair cables |

Please contact your local Borealis representative for specific assistance.

Packaging

| | |
|----------|----------|
| Package: | Bags |
| | Bulk |
| | Octabins |

Storage

Borcell HE4873 should be stored in dry conditions at temperatures below 50°C and protected from UV-light.



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Safety

The product is not classified as dangerous. Check and follow local codes and regulations!

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.

Disclaimer

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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