



HD00108WBK

High Density Polyethylene Black Compound Resin

Special Characteristics: PlastMate HD00108WBK is black bimodal high density polyethylene compound with excellent weathering and UV resistance by well-dispersed of high-quality carbon black. This grade is suitable for producing fiber optic cable jacketing.

Typical Applications: Fiber optic cable jacketing

International Standard: ASTM D1248 (Type III, Class C, Category 5)*

*PlastMate HD00108WBK grade meets the following raw materials specifications.

Typical Properties:

| Properties | HD00108WBK | Unit | Test Method |
|---|------------------------|-------------------|------------------------|
| Physical and Mechanical Properties | | | |
| Melt Index (190°C, 2.16 Kg) | 0.16 | g/10 min | ISO 1133 |
| Density | 0.958 | g/cm ³ | ISO 1183 |
| Carbon Black Content | 2.5 | % | ISO 6964 |
| Tensile Strength | 33 | MPa | ISO 527 |
| Elongation at Break | 900 | % | ISO 527 |
| Oxidation Induction Time (210°C) | 70 | Min | ISO 11357 |
| ESCR, F ₀ (Condition B, 10% Igepal, 50°C) | > 5,000 | Hrs | ASTM D1693 |
| Flexural Modulus | 800 | MPa | ISO 178 |
| Durometer Hardness | 64 | Shore D | ISO 868 |
| | | | |
| Electrical Properties | | | |
| | 10 ¹⁷ | Ohm.cm | ASTM D257 |
| Volume Resistivity | 10 ¹⁷ 27 | Ohm.cm kV/mm | ASTM D257 ASTM D149 |
| Volume Resistivity Dielectric Strength Dielectric Constant, 1 MHz | | | |

Recommendation:

Recommended melt temperature: 180 - 230°C

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