



Revised Date: February 2024

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			
Volume Resistivity	10 ¹⁷	Ohm.cm	ASTM D257
Dielectric Strength	27	kV/mm	ASTM D149
Dielectric Constant, 1 MHz	2.4	-	ASTM D150
Dissipation Factor, 1 MHz	0.0003		ASTM D150

Recommendation:

Recommended melt temperature: 180 – 230°C

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