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Hanwha
Wire & Cable Compound

CMBA-8240BK

Black MDPE Jacketing Compound

Melt Index	**0.23**
Density	**0.949**

Description

CMBA-8240BK is a black medium density polyethylene(MDPE) compound designed for power & communication cable jacketing applications. It combines excellent physical properties with good processing. It provides excellent resistance to environmental stress cracking(ESCR) and thermal oxidative degradation. It contains 2.5 % well-dispersed carbon black to ensure excellent weathering resistance.

Applications

CMBA-8240BK can be used for jacketing of power and communication cables.

Specifications

CMBA-8240BK meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

ASTM D1248 Type II, Class C, Category 5, Grade J4, E8, E9
BS 6234: Type H03C, TS2
IEC 60502, ST3, ST7
IEC 60840, ST3, ST7
ISO 1872-PE, KCHL, 33 D-006
NF C32-060

Physical Properties	Unit	Test Method	Typical Value
Melt Index	g/10min.	ASTM D1238	0.23
Density	g/cm^3	ASTM D1505	0.949
Carbon Black Content	%	ASTM D1603	2.5
Light Absorption Coefficient	Abs/mm	ASTM D3349	>400
Tensile Strength	kg/cm^2	ASTM D638	300
Elongation	%	ASTM D638	800
Oven Aging @ 110 °C, 14 days			
Retention of Tensile Strength	%	ASTM D638	>85
Retention of Elongation	%	ASTM D638	>85
ESCR, F_0 @ 50 °C, 10 % Igepal	hrs	ASTM D1693	>5,000
Low Temperature Brittleness	°C	ASTM D746	<-76
Hardness (Shore D, 1 sec.)	-	ASTM D2240	59
Oxidative Induction Time(200 °C, Al)	min.	ASTM D3895	>100

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Electrical Properties	Unit	Test Method	Typical Value
Dielectric Constant @ 1 MHz	-	ASTM D150	<2.5
Dissipation Factor @ 1 MHz	-	ASTM D150	<0.0005
DC Volume Resistivity	ohm cm	ASTM D257	$>10^{16}$

1) These are typical properties and are not to be regarded as specifications.
2) Under 50 mm/minute testing speed by molded / dumbbell shaped sheet

Processing Guidelines

CMBA-8240BK provides excellent surface finish and higher output rates over a broad range of conditions. For optimum results, melt extrusion temperatures in the range of 200~240 ℃(setting temperature: 160~230 ℃) is recommended. If needed, hopper drying at 70 ℃ for 3~5 hours is recommended to remove moisture.

Storage

The material should be stored indoors(15~25 ℃) in closed original packages in clean and dry environment. It is recommended that the using of the product on a first-in, first-out basis be established. Then recommended storage time at customer should not exceed 1 year.

Quality Systems

Hanwha maintains a quality management system according to ISO 9001. This system provides traceability of individual batches and their production. If process is changed in a way that suspected to change the properties of the product, Hanwha will provide adequate information to the customer.

Certificate

Based on quality inspection data at production, Hanwha supplies an inspection certificate for each batch. The certificate contains:

Product name
Batch number
Production date
etc.

Data Sheet and Safety

Most data sheets and safety data sheets are available on Hanwha web site, http://hcc.hanwha.co.kr
Please contact your Hanwha representative for more details on various aspects of safety, recovery and disposal of the product.