## Hanwha Wire & Cable Compound

# **CLBB-850BK**

Black LDPE Jacketing Compound

Melt Index	0.25
Density	0.933

#### Description

CLBB-850BK is a black low density polyethylene(LDPE) compound designed for cable jacketing applications. It provides an excellent environmental stress crack resistance(ESCR), low temperature performance, processability and good physical properties. It contains well-dispersed carbon black to ensure excellent weathering resistance.

#### Applications

CLBB-850BK can be used for jacketing of power and communication cables. It is mainly used for communication cables such as aircore and jelly-filled construction, and in both aerial and buried applications.

#### **Specifications**

CLBB-850BK meets the applicable requirements as below when processed using sound extrusion practice a and testing procedure:

ASTM D1248 Type I, Class C, Category 5, Grade E5, J1, J3				
BS 6234: Type 03C, TS2	ICEA : S-61-402, S-84-608-1988			
IEC 60502, ST3, ST7	Telcordia GR-421			
IEC 60840, ST3, ST7	ANSI : C8.35			

Physical Properties	Unit	<b>Test Method</b>	<b>Typical Value</b>
Melt Index	g/10min.	ASTM D1238	0.25
Density (Compound)	g/cm <sup>3</sup>	ASTM D1505	0.933
Light Absorption Coefficient	Abs/mm	ASTM D3349	>400
Tensile Strength	kg/cm <sup>2</sup>	ASTM D638	165
Elongation	%	ASTM D638	550
Oven Aging @ 100°C, 10 days			
Retention of Tensile Strength	%	ASTM D638	>85
Retention of Elongation	%	ASTM D638	>85
ESCR, F <sub>0</sub> @ 50°C, 10% Igepal	hrs	ASTM D1693	>2,000
Low Temperature Brittleness	°C	ASTM D746	<-76
Hardness (Shore D, 1 sec.)	-	ASTM D2240	53
Oxidative Induction Time(200°C, Al Pan)	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 200 mm/minute testing speed by molded / dumbbell shaped sheet

#### **Processing Guidelines**

CLBB-850BK provides excellent surface finish and higher output rates over a broad range of conditions. For optimum results, melt extrusion temperatures in the range of 200~230 °C(setting temperature: 160~220 °C) is recommended. If needed, hopper drying at 70 °C for 3~5 hours is recommended to remove moisture.

#### Storage

The material should be stored indoors(15~25 °C) 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.



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