

Black HDPE Jacketing Compound

**Melt Index**                    **0.23**  
**Density**                            **0.955**

## Description

CHBA-8241BK is a black high density polyethylene(HDPE) compound designed for power & communication cable jacketing applications. It combines excellent physical properties with good processing. It provides excellent environmental stress crack resistance(ESCR). It contains 2.5 % well-dispersed carbon black to ensure excellent weathering resistance.

## Applications

CHBA-8241BK can be used for jacketing of power and communication cables.

## Specifications

CHBA-8241BK meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

ASTM D1248 Type III, Class C, Category 5, Grade J4, E8, E9, W8, W9	
BS 6234: Type H03C, TS2	DIN VDE 0276-620, Type DMP2, DMP9
IEC 60502, ST7	ISO 1872-PE, KCHL, 45 D-006
IEC 60840, ST7	NF C32-060

Physical Properties	Unit	Test Method	Typical Value
Melt Index	g/10min.	ASTM D1238	0.23
Density (Compound)	g/cm <sup>3</sup>	ASTM D1505	0.955
Carbon Black Content	%	ASTM D1603	2.5
Light Absorption Coefficient	abs/mm	ASTM D3349	>400
Tensile Strength	kg/cm <sup>2</sup>	ASTM D638	300
Elongation	%	ASTM D638	800
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	>96
Low Temperature Brittleness	°C	ASTM D746	<-76
Hardness (Shore D, 1 sec.)	-	ASTM D2240	64
Oxidative Induction Time(200°C, Al)	min.	ASTM D3895	>100

Electrical Properties	Unit	Test Method	Typical Value
Dielectric Constant @ 1 MHz	-	ASTM D150	<2.4
Dissipation Factor @ 1 MHz	-	ASTM D150	<0.0005
DC Volume Resistivity	ohm cm	ASTM D257	>10 <sup>16</sup>

- 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

CHBA-8241BK 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 °C (setting temperature: 160~230 °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.

