# Hanwha Wire & Cable Compound

## **CTBA-8740BK**

Conductor and Insulation Shield

Density

1.14

#### **Description**

CTBA-8740BK is a semiconductive compound and has an excellent electrical conductivity, scorch stability and surface smoothness.

#### **Applications**

CTBA-8740BK can be used for bonded typed, conductor and insulation shielding of high voltage(up to 170 kV) power cables.

#### **Specifications**

CTBA-8740BK meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

IEC 60840, 62067

ANSI/ICEA 108-720-2004

<b>Physical Properties</b>	Unit	<b>Test Method</b>	<b>Typical Value</b>
Density	g/cm <sup>3</sup>	ASTM D1505	1.14
Tensile Strength	kg/cm <sup>2</sup>	ASTM D638	150
Elongation	%	ASTM D638	190
Oven Aging @ 135 °C, 7 days			
Retention of Tensile Strength	%	ASTM D638	>90
Retention of Elongation	%	ASTM D638	>85
Low Temperature Brittleness	°C	ASTM D746	<-40
Hardness (Shore D, 1 sec.)	-	ASTM D2240	58

<b>Electrical Properties</b>	Unit	Test Method	Typical Value
DC Volume Resistivity			
23 ℃	ohm cm	ASTM D257	<100
90 °C	ohm cm	ASTM D257	<500

<sup>1)</sup> These are typical properties and are not to be regarded as specifications.

<sup>2)</sup> Under 200 mm/minute testing speed by molded / dumbbell shaped sheet

#### **Processing Guidelines**

CTBA-8740BK provides excellent surface finish and higher output rates over a broad range of conditions. For optimum results, melt extrusion temperatures in the range of  $100\sim110$  °C is recommended. If needed, hopper drying at  $50\sim60$  °C for  $3\sim5$  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.