

Outdoor Cable Insulation

Density 0.923

Description

CLBB-8923BK is a black colored, peroxide contained crosslinkable, low density polyethylene compound with carbon black designed for outdoor cable insulation. It has an excellent tracking resistance, excellent processability, cure properties and scorch stability.

Applications

CLBB-8923BK can be used for the insulation of outdoor weather-resistant crosslinked power cable up to 33kV.

Specifications

CLBB-8923BK meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

KSC3327

ICEA S 66-524/NEMA WC7

Physical Properties	Unit	Test Method	Typical Value
Density (Compound)	g/cm ³	ASTM D1505	0.923
Tensile Strength	kg/cm ²	ASTM D638	200
Elongation	%	ASTM D638	550
Oven Aging @ 135°C, 7 days			
Retention of Tensile Strength	%	ASTM D638	>85
Retention of Elongation	%	ASTM D638	>85
Hot/Set @ 200°C, 20N/cm ²		IEC 60811-2-1	
Hot Elongation	%		<100
Permanent Set	%		<5
Low Temperature Brittleness	°C	ASTM D746	<-76
ESCR, F ₀ @50°C, 10% Igepal	hrs	ASTM D1693	>2,000
Weathering Resistance, 2000hr @ Weather-o-meter			
Retention of Tensile Strength	%	ASTM G26	>90
Retention of Elongation	%	ASTM G26	>90
Moisture	ppm	HCY-I-24205	<500

Electrical Properties	Unit	Test Method	Typical Value
Dielectric Constant @ 1 MHz	-	ASTM D150	<2.4
Dissipation Factor @ 1 MHz	-	ASTM D150	<0.001
Dielectric Strength	kV/mm	ASTM D149	>20
DC Volume Resistivity	ohm cm	ASTM D257	>10 ¹⁶

- 1) These are typical properties and are not to be regarded as specifications.
 2) Compression molded sample cured at 175 °C for 15 min.

Processing Guidelines

CLBB-8923BK provides excellent surface finish and higher output rates over a broad range of conditions. A range of extrusion temperature in processing condition is 115~125 °C. Optimum results are normally achieved at a melt resin temperature of approximately 130 °C. If needed hopper drying at 50~60 °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 sheet 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.

