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Hanwha
Wire & Cable Compound

8600H&L

HDPE for Physically Foaming Insulation of CATV & RF Cable

Description

CHNA-8600H is a high density polyethylene(HDPE) compound designed for the insulation of coaxial cable and radio frequency(RF) communication cables using a gas injection foaming process. It has excellent electrical properties and provides low attenuation at high frequency. CHNA-8600H is commonly used by blending with CLNA-8600L prior to extrusion. To obtain optimal cellular structure, a small amount of nucleating agent is recommended.
CLNA-8600L is a low density polyethylene(LDPE) compound designed for the insulation of coaxial cable and radio frequency communication cables. It has excellent electrical properties. CLNA-8600L is commonly used by blending with CHNA-8600H prior to extrusion.
Recommended blend ratios of 8600H/8600L/Nucleating agent are 68~78 / 30~20 / 2 %.

Applications

8600H&L can be used coaxial cable and radio frequency(RF) communication cables using a gas injection foaming process.

Specifications

8600H&L meets the applicable requirements as below when processed using sound extrusion pra
testing procedure:

CHNA-8600H : ASTM D1248 Type IV, Class A, Category 3
CLNA-8600L : ASTM D1248 Type I, Class A, Category 3

Physical Properties	Unit	Test Method	Typical Value	
			CHNA-8600H	CLNA-8600L
Melt Index	g/10min.	ASTM D1238	8.5	2.0
Density	g/cm^3	ASTM D1505	0.962	0.921
Tensile Strength	kg/cm^2	ASTM D638	260	120
Elongation	%	ASTM D638	500	600
Low Temperature Brittleness	℃	ASTM D746	<-76	<-76

Hanwha Chemical

Hanwha B/D, 1 Changgyo-dong, Chung-ku, Seoul, Korea. Tel : 82-2-729-2700 Fax : 82-2-729-2999 http://hcc.hanwha.co.kr

Electrical Properties	Unit	Test Method	Typical Value	
			CHNA-8600H	CLNA-8600L
Dielectric Constant @ 1 MHz	-	ASTM D150	2.35	2.28
Dissipation Factor @ 1 MHz	-	ASTM D150	0.00009	0.00008
DC Volume Resistivity	ohm cm	ASTM D257	$>10^{16}$	$>10^{16}$

1) These are typical properties and are not to be regarded as specifications.
2) Under 50(at 8600H) or 200(at 8600L) mm/minute testing speed by molded / dumbbell shaped sheet

Processing Guidelines

8600H&L provides excellent surface finish and higher output rates over a broad range of conditions A range of extrusion temperature in processing condition is 160~200℃.

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.

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