

Hanwha

Wire & Cable Compound

8380

HDPE for Solid/Skin Insulation

Melt Index

0.7

Density

0.945

Description

HD 8380 is a high molecular weight, high density polyethylene insulation compound especially designed for high-speed wire insulating extrusion process. It provides excellent processability, environmental and thermal stress cracking resistance. It meets major international aging test specification for both solid and foam/skin insulation.

Applications

CHNA-8380 can be used for the full range of telephone cable insulation including air-core, jelly-filled and LAN cable (Cat. 5/5e).

Specifications

CHNA-8380 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

ASTM D1248 Type III, Class A, Category 4, Grade E8, E9	
ICEA-S84-608	ISO 1872-PE, KCHL, 45 D-006
BS 6234 : Type H03	NF C32-060
IEC 60708	DIN VDE 0818

Physical Properties	Unit	Test Method	Typical Value
Melt Index	g/10min.	ASTM D1238	0.7
Density	g/cm ³	ASTM D1505	0.945
Tensile Strength	kg/cm ²	ASTM D638	240
Elongation	%	ASTM D638	550
Oven Aging @ 100℃, 48 hours			
Retention of Tensile Strength	%	ASTM D638	>90
Retention of Elongation	%	ASTM D638	>90
ESCR, F ₀ @ 50℃, 10% Igepal	hrs	ASTM D1693	>1000
Thermal Stress Crack	hrs	ASTM D2951	>96
Low Temperature Brittleness	℃	ASTM D746	<-76
Hardness (Shore D, 1 sec.)	-	ASTM D2240	53
Oxidative Induction Time(200℃, Al)	min.	ASTM D3895	>100



Electrical Properties	Unit	Test Method	Typical Value
Dielectric Constant @ 1 MHz	-	ASTM D150	<2.3
Dissipation Factor @ 1 MHz	-	ASTM D150	<0.0001
DC Volume Resistivity	ohm cm	ASTM D257	>10 ¹⁶

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

CHNA-8380 provides excellent surface and high output rates over a broad range of conditions. A range of extrusion temperature in processing condition is 240~280°C.

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.

