



Technical Data Sheet

AXELERON™ GP 1330 BK CPD

Black High Density Polyethylene Compound for Cable Jacketing

Description

AXELERON™ GP 1330 BK CPD is a black HDPE jacket grade for power and telecom cable applications. The material provides excellent mechanical, physical and aging properties such as environmental stress crack resistance in combination with excellent processability.

Specifications

AXELERON™ GP 1330 BK CPD meets the following material specifications

- ASTM D 1248 Type III, Class C, Category 5, Grade J4, E8, E9, W8, W9
- ISO 1872-PE, KHL, 50-D003

Cable jackets made of AXELERON™ GP 1330 BK CPD using sound commercial extrusion practices should meet the following specification:

- ST7 in IEC 60502, IEC 60840 and IEC 62067
- DMP2, DMP9, DMP10, DMP14, DMP15 and DMP17 in HD620
- Class HD in EN 50290-24
- ICEA S-94 649
- ICEA S-108 720
- ICEA S-97 682
- ICEA S-87-640
- BS 6234: Type H03C, TS2
- Telcordia GR-70-CORE

Properties

Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Density, 23°C	0.962	g/cm ³	0.962	g/cm ³	ISO 1183
Melt Index					ISO 1133
190°C/2.16 kg	0.5	g/10 min	0.5	g/10 min	
190°C/21.6 kg	54	g/10 min	54	g/10 min	
Environmental Stress-Cracking Resistance (ESCR)					IEC 60811-406
10% Igepal, 50°C, F0	> 4000	hr	> 4000	hr	
Environmental Stress-Cracking Resistance (ESCR)	> 4000	hr	> 4000	hr	ASTM D1693
Carbon Black Content	2.5	%	2.5	%	ASTM D1603
Mechanical					
Tensile Strength ¹	5200	psi	36.5	MPa	IEC 60811-501
Tensile Strength after 14 Days ¹ @ 110°C	4900	psi	33.9	MPa	IEC 60811-501
Tensile Elongation ¹	850	%	850	%	IEC 60811-501

1. Measured on dogbone specimens cut from compression molded plaques.



Properties (Cont.)

Mechanical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Elongation after 14 days ¹ @ 110°C	800	%	800	%	IEC 60811-501
Flexural Modulus ¹	155190	psi	1070	MPa	ISO 178
Hardness					
Hardness, Shore D	65	s	65	s	ISO 868
Pressure Test @ 115 °C	< 2	%	< 2	%	IEC 60811-508
Thermal					
Oxidative Induction Time, 200°C	160	min	160	min	ISO 11357-6
Electrical					
AC Breakdown Voltage, 23°C	38.7	kV/mm	38.7	kV/mm	ASTM D149
Volume Resistivity, 23°C	1.8*10 ⁻¹⁹	Ω·m	1.8*10 ⁻¹⁹	Ω·m	ASTM D991
Extrusion Notes					
AXELERON™ GP 1330 BK CPD provides excellent surface finish and outstanding output rates over a broad range of conditions. For optimum results, use melt extrusion temperatures in the suggested range of 392 to 450°F (185 to 210°C). Hopper drying at 175°F (80°C) to remove moisture is recommended. However, specific recommendations for processing conditions can be determined only when the application and type of processing equipment are known.					
Notes:					
• ISO: International Standardization Organization • IEC: International Electrotechnical Commission • ASTM: American Society for Testing and Materials					

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