



AXELERON™ FO 6318 BK CPD

Black High Density Polyethylene Compound for Cable Jacketing

Overview

AXELERON™ FO 6318 BK CPD is a high-density polyethylene jacket compound ("CPD") produced from resin made by the UNIPOL™ PE process. This compound provides easy processability, low shrinkage characteristics and a good balance of toughness, stress-cracking resistance, abrasion resistance, and weather resistance. AXELERON™ FO 6318 BK CPD is suited for use as jacketing for fiber optic cables.

Specifications

AXELERON™ FO 6318 BK CPD meets the following raw material specifications:

- ASTM D 1248 Type III, Class C, Category 4, Grades E8, E9

Wire and cables covered with AXELERON™ FO 6318 BK CPD, using sound commercial extrusion practice, should meet the following specifications:

- ICEA: S-61-402
- ANSI: C8.35
- REA PE 39 and PE 89
- IEC 60502

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.954 g/cm ³	0.954 g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	0.70 g/10 min	0.70 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal, F0	> 450 hr	> 450 hr	
Carbon Black Content	2.6 %	2.6 %	ASTM D1603
Absorption Coefficient - (kAB/m)	> 400	> 400	ASTM D3349
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength	3200 psi	22.1 MPa	ASTM D638
Tensile Elongation (Break)	600 %	600 %	ASTM D638
Flexural Modulus	130000 psi	896 MPa	ASTM D790
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
CLTE - Flow (73°F (23°C))	7.2E-5 in/in/°F	1.3E-4 cm/cm/°C	Dow Method
Thermal Stress Crack Resistance - F0	> 336 hr	> 336 hr	ASTM D2951
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Constant (1 MHz)	2.50	2.50	ASTM D1531
Dissipation Factor (1 MHz)	3.0E-4	3.0E-4	ASTM D1531
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	425 to 500 °F	218 to 260 °C	

Extrusion Notes

AXELERON™ FO 6318 BK CPD Jacket Compound can be processed in a wide range of extrusion equipment using flat profiles of 425-500°F (218-260°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

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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Published: 2005-11-17

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