



AXELERON™ CX 6944 NT CPD

High Density Polyethylene Insulation Compound

Overview

AXELERON™ CX 6944 NT CPD is a high density polyethylene compound ("CPD") designed for gas-injected foam insulation for CATV cable. This high density polyethylene compound has excellent electrical properties and toughness, as well as the needed stabilization for these applications. AXELERON™ CX 6944 NT CPD is commonly used in combination with AXELERON™ CX 1253 NT CPD LDPE. To obtain optimal cellular structure, an additional 0.1% to 0.3% of a suitable nucleating agent is recommended such as those in AXELERON™ CX A-0012 NT CPD and AXELERON™ CX 0078 NT CPD masterbatches.

Specifications

Dow AXELERON™ CX 6944 NT CPD meets the following raw material specification:

- ASTM D 1248 Type IV, Class A, Category 3

Wire insulated with Dow AXELERON™ CX 6944 NT CPD, using sound commercial extrusion practices, should meet the requirements of:

- Telecordia GR-1398-CORE
- Telecordia GR-1399-CORE

Additive

- Nucleating Agent

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.965 g/cm ³	0.965 g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength	4800 psi	33.1 MPa	ASTM D638
Tensile Elongation (Break)	650 %	650 %	ASTM D638
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -148 °F	< -100 °C	ASTM D746
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Constant (1 MHz)	2.34	2.34	ASTM D1531
Dissipation Factor (1 MHz)	4.0E-5	4.0E-5	ASTM D1531
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	320 to 355 °F	160 to 179 °C	
Extrusion Notes			

Melt extrusion temperatures in the range of 320 to 355°F (160 to 179°C) are suggested for AXELERON™ CX 6944 NT CPD.

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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