AXELERON™ CX 1253 NT CPD
Low Density Polyethylene Insulation Compound

Overview

AXELERON™ CX 1253 NT CPD is a medium molecular weight, low density polyethylene insulation compound ("CPD") resin produced to a demanding set of electrical property specifications. DFDA-1253 Natural can be used as part of the resin system in the gas injection process for coaxial cable foamed insulation.

Specifications

AXELERON™ CX 1253 NT CPD meets the following raw material specifications:

- ASTM D 1248 Type 1, Class A, Category 3
- Federal LP-390C Type 1, Class L, Grades 1 and 2, Category 3

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.919	g/cm³	0.919	g/cm³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	1.8	g/10 min	1.8	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength	1650	psi	11.4	MPa	ASTM D638
Tensile Elongation (Break)	600	%	600	%	ASTM D638
Electrical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Volume Resistivity	> 1.0E+16	ohms·cm	> 1.0E+16	ohms·cm	ASTM D257
Dielectric Strength					ASTM D149
0.125 in (3.18 mm), Method A (Short-Time)	550	V/mil	22	kV/mm	
Dielectric Constant (1 MHz)	2.27		2.27		ASTM D1531
Dissipation Factor (1 MHz)	7.0E-5		7.0E-5		ASTM D1531

Extrusion	Nominal Value	(English)	Nominal Value	(SI)
Melt Temperature	374 to 428	°F	190 to 220	°C

Extrusion Notes

AXELERON™ CX 1253 NT 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 375 to 425°F (190 to 220°C). 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.