AXELERON™ CX 4960 NT CPD
Low Density Polyethylene Cellular Insulation Compound

Overview

AXELERON™ CX 4960 NT CPD is an expandable, low-density polyethylene compound ("CPD") designed for use as insulation in applications requiring good cell structure and low electrical losses. It contains a temperature-sensitive blowing agent to provide a density between 0.40 and 0.48 g/cm³ when completely foamed.

AXELERON™ CX 4960 NT CPD is widely used in coaxial applications, twin lead and CATV cables.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density					ASTM D792
-- [1]	0.440	g/cm³	0.440	g/cm³	
-- [2]	0.918	g/cm³	0.918	g/cm³	
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					ASTM D638
-- [2]	1650	psi	11.4	MPa	
-- [1]	600	psi	4.14	MPa	
Tensile Elongation					ASTM D638
Break [2]	500	%	500	%	
Break [1]	300	%	300	%	
Electrical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Dielectric Strength					ASTM D149
0.125 in (3.18 mm), Method A (Short-Time)	220	V/mil	8.7	kV/mm	
Dielectric Constant					ASTM D1531
1 MHz [3]	2.28		2.28		
1 MHz [1]	1.50		1.50		
Dissipation Factor					ASTM D1531
1 MHz [3]	3.0E-4		3.0E-4		
1 MHz [1]	1.5E-4		1.5E-4		

Extrusion	Nominal Value	(English)	Nominal Value	(SI)
Melt Temperature	280 to 320	°F	138 to 160	°C

Extrusion Notes

AXELERON™ CX 4960 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 280 to 320°F (138-160°C). However, specific recommendations for processing conditions can be determined only when the application and type of processing equipment are known. Please contact your local Dow Wire and Cable sales representative for such particulars.

Notes

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

[1] Expanded: values largely subject to processing conditions

[2] Solid

[3] Unexpanded