



AXELERON™ CX 6923 NT CPD

Overview

AXELERON™ CX 6923 NT CPD is a high density polyethylene compound designed for use in physical foaming processes where high expansion rates (60 - 80%) are required. This compound is designed to offer excellent high speed processability as given by low extrusion pressures and smooth insulation surface quality. Furthermore, since it is fully pre-compounded with all the necessary ingredients, it offers better dispersion of the nucleating agent allowing higher expansion rates to be achieved with more consistent processability (capacitance and diameter). It is stabilized for long term cable performance with minimal impact on signal attenuation.

Applications:

Typical applications include conventional 75 Ohm CATV cables and LAN cables.

Specifications:

AXELERON™ CX 6923 NT CPD meets the following material specifications:

- ASTM D 1248 Class A, Type III, Category 3
- ISO 1875-PE, KGHN, 45-D-045

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.946 g/cm ³	0.946 g/cm ³	ISO 1183
Melt Mass-Flow Rate (140°C/5.0 kg)	5.6 g/10 min	5.6 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹	2900 psi	20.0 MPa	IEC 60811-501
Tensile Elongation ¹ (Break)	1100 %	1100 %	IEC 60811-501
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness ² (Shore D)	64	64	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Oxidation Induction Time - Aluminum pan (392°F)	20 min	20 min	IEC 60811-410
Electrical	Nominal Value (English)	Nominal Value (SI)	Test Method
Dielectric Constant (2.47 GHz)	2.40	2.40	IEC 60250
Dissipation Factor (2.47 GHz)	1.2E-4	1.2E-4	IEC 60250
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	338 to 374 °F	170 to 190 °C	

Extrusion Notes

AXELERON™ CX 6923 NT CPD can be processed using a range of commercial gas injection systems.

It is normally extruded with a target melt temperature of 170 - 190 °C. Typical barrel temperatures required depend on extruder size and construction being made but a good starting point is:

- Feed zone: 140 - 150 °C
- Transition zone: 160 - 170 °C
- Injection Point: 180 - 190 °C
- Metering zone: 180 - 190 °C
- Cross head and Die: 180 - 190 °C

Notes

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

¹ Measured on extruded tape

² Measured on compression moulded plaques

