



DOW™ Electrical & Telecommunications DGDA-1310 NT

Colorable High Density Polyethylene Compound for Cable Jacketing

Overview

Dow Electrical and Telecommunications DGDA-1310 NT High Density Polyethylene Resin is a high performance resin with an outstanding balance of processability and toughness. Dow Electrical and Telecommunications DGDA-1310 NT is designed for use in wire and cable extrusion for Monosil process and both power and telecommunication jacketing. DGDA-1310 NT also has excellent electrical properties and superior environmental stress crack resistance.

Specifications

Dow Electrical and Telecommunications DGDA-1310 NT meets the following specification:

- ASTM D-1248 Type III, Class A, Category 5, Grade E9

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			ASTM D1238
190°C/2.16 kg	0.28 g/10 min	0.28 g/10 min	
190°C/21.6 kg	27 g/10 min	27 g/10 min	
Environmental Stress-Cracking Resistance (ESCR) ¹			ASTM D1693
122°F (50°C), 100% Igepal, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	3300 psi	22.8 MPa	ASTM D638
Tensile Elongation ¹ (Break)	> 750 %	> 750 %	ASTM D638
Flexural Modulus - 2% Secant ¹	145000 psi	1000 MPa	ASTM D790B
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature ¹	< -76.0 °F	< -60.0 °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)	1.0E-4	1.0E-4	ASTM D1531
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	450 to 480 °F	232 to 249 °C	

Extrusion Notes

Dow Electrical and Telecommunications DGDA-1310 NT provides excellent surface finish at high coating speeds. For optimum results, use melt extrusion temperatures in the suggested range of 450 to 480°F (230 to 250°C). However, specific recommendations for processing conditions can be determined only when the applications 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.

¹ Plaque molded and tested in accordance with ASTM D4976.

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