



# 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 <sup>3</sup>	0.954 g/cm <sup>3</sup>	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) <sup>1</sup>			ASTM D1693
122°F (50°C), 100% Igepal, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>1</sup> (Yield)	3300 psi	22.8 MPa	ASTM D638
Tensile Elongation <sup>1</sup> (Break)	> 750 %	> 750 %	ASTM D638
Flexural Modulus - 2% Secant <sup>1</sup>	145000 psi	1000 MPa	ASTM D790B
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature <sup>1</sup>	< -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 rang 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.

<sup>1</sup> Plaques molded and tested in accordance with ASTM D4976.

