



DOW™ HDPE TCP-2495 NT High Density Polyethylene Resin

Overview

Industrial Standards Compliance:

- ASTM D 3350: cell classification PE335440A

DOW TCP-2495 NT High Density Polyethylene Resin is produced using UNIPOL™ process technology. It is specifically designed for use in all duct and cable in conduit (CIC) applications for both telecommunications and power cables. The natural resin combined with color concentrate can be readily processed by any current duct or conduit extrusion method in all sizes at commercial rates.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.946 g/cm ³	0.946 g/cm ³	ASTM D792
Melt Index			ASTM D1238
190°C/2.16 kg	0.21 g/10 min	0.21 g/10 min	
190°C/21.6 kg	21 g/10 min	21 g/10 min	
Environmental Stress-Cracking Resistance (ESCR) ¹			ASTM D1693C
F0	> 3000 hr	> 3000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D638
Yield	3300 psi	22.8 MPa	
Break	5000 psi	34.5 MPa	
Tensile Elongation ¹ (Break)	> 1000 %	> 1000 %	ASTM D638
Flexural Modulus ^{2,1}	125000 psi	862 MPa	ASTM D790B
Slow Crack Growth PENT ³ (176°F (80°C))	> 10 hr	> 10 hr	ASTM F1473
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact ¹ (73°F (23°C))	2.0 ft-lb/in	110 J/m	ASTM D256A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness ¹ (Shore D)	68	68	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature ¹	< -139 °F	< -95.0 °C	ASTM D746A
Melting Temperature (DSC)	262 °F	128 °C	Dow Method
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	400 to 440 °F	204 to 227 °C	

Extrusion Notes

Fabrication Conditions For Extruded Pipe:

- Screw Type: High quality HDPE (preferably barrier for complete melting)
- Melt Temperature Range: 400-440 °F (205-225 °C)

Notes

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

¹ Compression molded parts prepared according to procedure C. Properties will vary with changes in molding conditions and aging time.

² Method I (3 point load)

³ 2.4 MPa

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