

DOW™ HDPE TCP-2495 NT

High Density Polyethylene Resin
The Dow Chemical Company

Technical Data

Product Description

- 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.

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• The Dow Chemical Company
Availability	• North America
Agency Ratings	• ASTM D 3350 PE335440A
Forms	• Pellets
Processing Method	• Profile Extrusion

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.946 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)		ASTM D1238
190°C/2.16 kg	0.21 g/10 min	
190°C/21.6 kg	21 g/10 min	
Environmental Stress-Cracking Resistance ³ F0	> 3000 hr	ASTM D1693C

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³		ASTM D638
Yield	22.8 MPa	
Break	34.5 MPa	
Tensile Elongation ³ (Break)	> 1000 %	ASTM D638
Flexural Modulus ^{4, 3}	862 MPa	ASTM D790B
Slow Crack Growth PENT ⁵ (80°C)	> 10 hr	ASTM F1473

Impact	Nominal Value Unit	Test Method
Notched Izod Impact ³ (23°C)	110 J/m	ASTM D256A

Hardness	Nominal Value Unit	Test Method
Durometer Hardness ³ (Shore D)	68	ASTM D2240

Thermal	Nominal Value Unit	Test Method
Brittleness Temperature ³	< -95.0 °C	ASTM D746A
Melting Temperature (DSC)	128 °C	Internal Method

Extrusion	Nominal Value Unit
Melt Temperature	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)