



Technical Data Sheet

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.

Sustainability Attribute:



Additive

- Antiblock: No
- Slip: No
- Processing aid: No

Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
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) ²					ASTM D1693C
F0	> 3000	hr	> 3000	hr	
Mechanical					
Tensile Strength ²					ASTM D638
Yield	3300	psi	22.8	MPa	
Break	5000	psi	34.5	MPa	
Tensile Elongation ² (Break)	> 1000	%	> 1000	%	ASTM D638

1. ASTM: American Society for Testing and Materials

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

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

Physical Properties (Cont.)

Mechanical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Flexural Modulus ^{2,3}	125000	psi	862	MPa	ASTM D790B
Slow Crack Growth PENT ⁴ (176°F / 80°C)	> 10	hr	> 10	hr	ASTM F1473
Impact					
Notched Izod Impact ² (73°F / 23°C)	2.0	ft-lb/in	110	J/m	ASTM D256A
Hardness					
Durometer Hardness ² (Shore D)	68		68		ASTM D2240
Thermal					
Brittleness Temperature ²	< -139	°F	< -95.0	°C	ASTM D746A
Melting Temperature (DSC)	262	°F	128	°C	Dow Method
Extrusion					
Melt Temperature	400 to 440	°F	204 to 227	°C	
Extrusion Notes					
Fabrication Conditions for Extruded Pipe:					
<ul style="list-style-type: none"> Screw Type: High quality HDPE (preferably barrier for complete melting) Melt Temperature Range: 400–440°F (205–225°C) 					

3. Method I (3 point load)

4. 2.4 MPa

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