DOW™ HDPE TCP-2495 NT

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

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		
Availability	• North America		
Additive	• Antiblock: No	• Processing Aid: No	• Slip: No
Agency Ratings	• ASTM D3350 PE335440A		
Forms	• Pellets		
Processing Method	• Profile Extrusion		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.948		ASTM D792
Melt Mass-Flow Rate			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 (ESCR) [2] (F0)	> 3000	hr	ASTM D1693C
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	3300	psi	ASTM D638
Tensile Strength [2] (Break)	5000	psi	ASTM D638
Tensile Elongation [2] (Break)	> 1000	%	ASTM D638
Flexural Modulus [3, 2]	125000	psi	ASTM D790B
Slow Crack Growth PENT [4] (176°F)	> 10	hr	ASTM F1473
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact [2] (73°F)	2.0	ft·lb/in	ASTM D256A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness [2] (Shore D)	68		ASTM D2240
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature [2]	< -139	°F	ASTM D746A
Melting Temperature (DSC)	262	°F	Internal Method

Processing Information

Extrusion	Nominal Value	Unit
Melt Temperature	400 to 440	°F

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)

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Notes

[1] Typical properties: these are not to be construed as specifications.

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

[3] Method I (3 point load)

[4] 2.4 MPa