



# DOW™ HDPE DGDA-2485 NT High Density Polyethylene Resin

## Overview

Industrial Standards Compliance:

- ASTM D 3350: cell classification PE346460A (See NOTES 1)
- American Association of State Highway and Transportation Officials (AASHTO) M294/MP7 (See NOTES 2)

DOW DGDA-2485 NT High Density Polyethylene resin is produced using UNIPOL™ II process technology and meets the needs of a wide variety of end uses including profile extrusion applications such as corrugated pipe. It combines excellent ESCR/NCLS with superior toughness and processability.

NOTES:

(1) The first five numbers of the cell classification are based on natural resin. The last number and letter are based on black resin (natural resin plus 6.5% DFNF-0092).

(2) Natural resin extruded under proper conditions with carbon black masterbatch DFNF-0092 (6.5%).

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.947 g/cm <sup>3</sup>	0.947 g/cm <sup>3</sup>	ASTM D792
Melt Index			ASTM D1238
190°C/2.16 kg	0.060 g/10 min	0.060 g/10 min	
190°C/21.6 kg	9.5 g/10 min	9.5 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3100 psi	21.4 MPa	
Break	5800 psi	40.0 MPa	
Tensile Elongation (Break)	> 690 %	> 690 %	ASTM D638
Flexural Modulus	185000 psi	1280 MPa	ASTM D790B <sup>1</sup>
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Brittleness Temperature	< -103 °F	< -75.0 °C	ASTM D746
Melting Temperature (DSC)	268 °F	131 °C	Dow Method
Additional Information	Nominal Value (English)	Nominal Value (SI)	Test Method
NCLS	> 29.8 wk	> 29.8 wk	ASTM F2136
Compression molded parts prepared according to ASTM D 1928 Procedure C. Properties will vary with changes in molding conditions and aging time.			
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	380 to 440 °F	193 to 227 °C	

## Extrusion Notes

Fabrication Conditions:

- Screw Type: High Quality HDPE (preferably barrier for complete melting)
- Melt Temperature Range: 380-440 °F (193-225 °C)

## 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> Method I (3 point load)

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