

DOW™ HDPE DGDA-2485 NT

High Density Polyethylene Resin
The Dow Chemical Company

Technical Data

Product Description

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%).

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• The Dow Chemical Company
Availability	• Asia Pacific • North America
Agency Ratings	• AASHTO M294/MP 7 • ASTM D 3350 PE346460A
Forms	• Pellets
Processing Method	• Profile Extrusion

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.947 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)		ASTM D1238
190°C/2.16 kg	0.060 g/10 min	
190°C/21.6 kg	9.5 g/10 min	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield	21.4 MPa	
Break	40.0 MPa	
Tensile Elongation (Break)	> 690 %	ASTM D638
Flexural Modulus ³	1280 MPa	ASTM D790B

Thermal	Nominal Value Unit	Test Method
Brittleness Temperature	< -75.0 °C	ASTM D746
Melting Temperature (DSC)	131 °C	Internal Method

Additional Information	Nominal Value Unit	Test Method
NCLS	> 5000 hr	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 Unit
Melt Temperature	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

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Method I (3 point load)