



UNIVAL™ DMDG-6240 NT 7 High Density Polyethylene Resin

Overview

UNIVAL™ DMDG-6240 NT 7 is a multipurpose polymer designed for high speed production of blow molded containers used to package household industrial chemicals, such as laundry detergent, health and medicinal aids as well as agricultural and food products. The product is specifically designed to provide excellent processing in all extrusion blow molding equipment.

Main Characteristics:

- Excellent processability
- High melt strength
- Excellent ESCR

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.2a.
- Canadian HPFB No Objection

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.946 g/cm ³	0.946 g/cm ³	ASTM D792
Base Density ¹	0.946 g/cm ³	0.946 g/cm ³	Dow Method
Melt Index			ASTM D1238
190°C/2.16 kg	0.40 g/10 min	0.40 g/10 min	
190°C/21.6 kg	43 g/10 min	43 g/10 min	
Environmental Stress-Cracking Resistance			ASTM D1693
122°F (50°C), 100% Igepal, F50	400 hr	400 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3450 psi	23.8 MPa	
Break	2400 psi	16.5 MPa	
Tensile Elongation			ASTM D638
Yield	11 %	11 %	
Break	770 %	770 %	
Flexural Modulus			ASTM D790B
1% Secant	148000 psi	1020 MPa	
2% Secant	118000 psi	814 MPa	
Tangent	167000 psi	1150 MPa	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ²	72.0 ft·lb/in ²	151 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	62	62	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	145 °F	62.8 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	250 °F	121 °C	ASTM D1525
Melting Temperature (DSC)	259 °F	126 °C	Dow Method
Peak Crystallization Temperature (DSC)	226 °F	108 °C	Dow Method

Additional Information

Plaque molded and tested in accordance with ASTM D 4976.

