



UNIVAL™ DMDG-6240 NT 7

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

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.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Additive	• Antiblock: No • Processing Aid: No • Slip: No
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.2a • HPFB (Canada) No Objection
Forms	• Pellets
Processing Method	• Blow Molding

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.948		ASTM D792
Melt Mass-Flow Rate			ASTM D1238
190°C/2.16 kg	0.40	g/10 min	
190°C/21.6 kg	43	g/10 min	
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F, 100% Igepal, F50	400	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	3450	psi	ASTM D638
Tensile Strength (Break)	2400	psi	ASTM D638
Tensile Elongation (Yield)	11	%	ASTM D638
Tensile Elongation (Break)	770	%	ASTM D638
Flexural Modulus			ASTM D790B
1% Secant	148000	psi	
2% Secant	118000	psi	
Tangent	167000	psi	
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ²	72.0	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	62		ASTM D2240

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	145	°F	ASTM D648
Brittleness Temperature	< -105	°F	ASTM D746
Vicat Softening Temperature	250	°F	ASTM D1525
Melting Temperature (DSC)	259	°F	Internal Method
Peak Crystallization Temperature (DSC)	226	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D 4976.

Notes

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

² Type S