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/cm³	0.946	g/cm³	ASTM D792
Base Density [1]	0.946	g/cm³	0.946	g/cm³	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 (ESCR)					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/in²	151	kJ/m²	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.

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Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

[1] Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

[2] Type S

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