



UNIVAL™ DMDA-6320 NT 7 High Density Polyethylene Resin

Overview

UNIVAL™ DMDA-6320 NT 7 High Density Polyethylene (HDPE) Resin is a multipurpose polymer designed for the high speed production of blow molded containers used to package household industrial chemicals (e.g., detergents, bleach, fabric softeners), toiletries and cosmetics (e.g., shampoos, creams, lotions, etc.), health and medicinal aids, and food products. In addition, it can be blow molded into other thin walled parts and houseware items and can be extruded into profiles.

- Excellent stress-crack resistance and rigidity
- High impact strength
- Low swell
- Good melt strength
- Contains antistat

Complies with:

- Canadian HPFB No Objection (with limitations)
- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- U.S. FDA -DMF

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.953 g/cm ³	0.953 g/cm ³	ASTM D792
Melt Index			ASTM D1238
190°C/2.16 kg	0.46 g/10 min	0.46 g/10 min	
190°C/21.6 kg	39 g/10 min	39 g/10 min	
Environmental Stress-Cracking Resistance			ASTM D1693
122°F (50°C), 100% Igepal, F50	40.0 hr	40.0 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3700 psi	25.5 MPa	
Break	4900 psi	33.8 MPa	
Tensile Elongation			ASTM D638
Yield	8.0 %	8.0 %	
Break	1000 %	1000 %	
Flexural Modulus - 2% Secant	146000 psi	1010 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹	80.0 ft-lb/in ²	168 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	64	64	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	158 °F	70.0 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	262 °F	128 °C	ASTM D1525
Melting Temperature (DSC)	268 °F	131 °C	Dow Method
Peak Crystallization Temperature (DSC)	244 °F	118 °C	Dow Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

