UNIVAL™ DMDA-6200 NT 7
High Density Polyethylene Resin

Overview

- Excellent stress crack resistance and rigidity
- High impact strength
- Moderate swell
- High melt strength
- Complies with:
  - U.S. FDA 21 CFR 177.1520 (c) 3.2a
  - U.S. FDA-DMF
  - Canadian HPFB No Objection (with Limitations)
  - Europe EU-Directive 2002/72/EC (See NOTES)
  - Underwriters Laboratories Inc. (ULI)
  - Consult the regulations for complete details.

UNIVAL™ DMDA-6200 NT 7 High Density Polyethylene (HDPE) Resin is a multipurpose polymer designed for 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 also can be extruded into profiles.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.953 g/cm³	0.953 g/cm³	ASTM D792
Melt Index			ASTM D1238
190°C/2.16 kg	0.38 g/10 min	0.38 g/10 min	
190°C/21.6 kg	33 g/10 min	33 g/10 min	
Environmental Stress-Cracking Resistance			ASTM D1693
122°F (50°C), 100% Igepal, F50	80.0 hr	80.0 hr	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength			ASTM D638
Yield	3900 psi	26.9 MPa	
Break	4500 psi	31.0 MPa	
Tensile Elongation			ASTM D638
Yield	7.0 %	7.0 %	
Break	1000 %	1000 %	
Flexural Modulus - 2% Secant	145000 psi	1000 MPa	ASTM D790B
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Impact Strength	80.0 ft·lb/in²	168 kJ/m²	ASTM D1822 [1]
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	61	61	ASTM D2240
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	163 °F	73.0 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	264 °F	129 °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.

Notes

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

[1] Type S

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