



UNIVAL™ DMDD-6230 NT 7 High Density Polyethylene Resin

Overview

- Outstanding environmental stress crack resistance
- High impact strength
- Good extrusion characteristics

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- U.S. FDA-DMF
- U.S. USP Class VI
- Canadian HPFB No Objection (With Limitations)
- EU, No 10/2011

Consult the regulations for complete details.

UNIVAL™ DMDD-6230 NT 7 High Density Polyethylene (HDPE) Resin is specifically designed for use in either intermittent or continuous blow molding equipment to produce containers up to 20 gallons in size - applications that typically require the combination of outstanding environmental stress crack resistance (ESCR) and, high impact strength. UNIVAL DMDD- 6230 NT 7 HDPE resin also is considered a multi-purpose blow molding resin designed for the high speed production of blow molded containers used for packaging household industrial chemicals (e.g., detergents, bleach, fabric softeners), toiletries and cosmetics (e.g., shampoos, creams, lotions, etc.), health and medicinal aids. In addition, it can be blow molded into other thin walled parts and houseware items, and also can be extruded into profiles or sheets.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.949 g/cm ³	0.949 g/cm ³	ASTM D792
Melt Index			ASTM D1238
190°C/2.16 kg	0.25 g/10 min	0.25 g/10 min	
190°C/21.6 kg	25 g/10 min	25 g/10 min	
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	180 hr	180 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3400 psi	23.4 MPa	
Break	4900 psi	33.8 MPa	
Tensile Elongation			ASTM D638
Yield	8.0 %	8.0 %	
Break	1000 %	1000 %	
Flexural Modulus - 2% Secant	129000 psi	889 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹	100 ft-lb/in ²	210 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	60	60	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	151 °F	66.0 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	261 °F	127 °C	ASTM D1525
Melting Temperature (DSC)	266 °F	130 °C	Dow Method
Peak Crystallization Temperature (DSC)	244 °F	118 °C	Dow Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

