



UNIVAL™ DMDC-6145 NT 7 High Density Polyethylene Resin

Overview

- Outstanding environmental stress crack resistance
- Excellent parison melt strength / low sag
- Good extrudability / processability
- Good rigidity
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a
- Complies with Canadian HPFB No Objection (With Limitations)
- Consult the regulations for complete details.

UNIVAL™ DMDC-6145 NT 7 High Density Polyethylene (HDPE) Resin provides good parison stability, which contributes to uniform wall thickness in large parts, making it ideal for blow molded containers ranging from, 5-15 gallon (9-57 liter) tight-head pails to 30-gallon (114 liter) drums. Containers molded from this resin offer outstanding environmental stress cracking resistance (ESCR) and excellent rigidity. The appearance of finished blow molded parts made from this resin is excellent.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.951 g/cm ³	0.951 g/cm ³	ASTM D792
Melt Index (190°C/21.6 kg)	14 g/10 min	14 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	> 1500 hr	> 1500 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3700 psi	25.5 MPa	
Break	5000 psi	34.5 MPa	
Tensile Elongation			ASTM D638
Yield	7.0 %	7.0 %	
Break	1000 %	1000 %	
Flexural Modulus - 2% Secant	131000 psi	903 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹	120 ft·lb/in ²	252 kJ/m ²	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	149 °F	65.0 °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)	243 °F	117 °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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