



UNIVAL™ DMDC-6143 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)
- Complies with EU, No 10/2011
- Consult the regulations for complete details.

UNIVAL™ DMDC-6143 NT 7 High Density Polyethylene (HDPE) Resin is a polymer with broad molecular weight distribution and high molecular weight polymer. This product provides good stability, which contributes to uniform wall thickness in large parts, making it ideal for blow molding of containers, such as the 5-30 gallon (19-114 liter) tight-head pails, and other large parts. The broad molecular weight distribution of this resin contributes to the outstanding environmental stress crack resistance (ESCR), good rigidity level and extrudability it offers.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.952 g/cm ³	0.952 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	1100 hr	1100 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3400 psi	23.4 MPa	
Break	5500 psi	37.9 MPa	
Tensile Elongation			ASTM D638
Yield	10 %	10 %	
Break	900 %	900 %	
Flexural Modulus - 2% Secant	148000 psi	1020 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹	170 ft·lb/in ²	357 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	65	65	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	153 °F	67.0 °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)	257 °F	125 °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

