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/cm³	0.952	g/cm³	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/in²	357	kJ/m²	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

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