



CONTINUUM™ DMDE-6620 NT 7 BIMODAL Bimodal Polyethylene Resin

Overview

DMDE-6620 NT 7 Bimodal High Density Polyethylene Resin is produced by UNIPOL™ II process technology. This resin is a high stiffness resin with superior top-load performance in conjunction with excellent environmental stress crack resistance and excellent gas barrier properties. DMDE-6620 NT 7 is specifically designed for use in multiple types of blow molding processes, producing containers up to 20 gallons in size, which require superior top-load combined with excellent environmental stress crack resistance and gas barrier properties. This product offers excellent processability with low plate out properties. This product is especially well suited for containers used to package household industrial chemicals (e.g. detergents, and fabric softeners), toiletries and cosmetics (e.g. shampoos, creams, lotions, etc.), health, pharmaceutical, and food products.

- High stiffness for superior top-load performance
- Excellent environmental stress crack resistance
- Excellent gas barrier properties
- High impact strength
- Good extrusion characteristics

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.1a
- EU, No 10/2011
- Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.960 g/cm ³	0.960 g/cm ³	ASTM D792
Base Density ¹	0.958 g/cm ³	0.958 g/cm ³	Dow Method
Melt Index			ASTM D1238
190°C/2.16 kg	0.28 g/10 min	0.28 g/10 min	
190°C/21.6 kg	27 g/10 min	27 g/10 min	
Environmental Stress-Cracking Resistance			ASTM D1693
122°F (50°C), 10% Igepal, F50	220 hr	220 hr	
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	4060 psi	28.0 MPa	
Break	2610 psi	18.0 MPa	
Tensile Elongation			ASTM D638
Yield	8.0 %	8.0 %	
Break	670 %	670 %	
Flexural Modulus - 2% Secant	170000 psi	1170 MPa	ASTM D790B
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	59	59	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	180 °F	82.0 °C	
Brittleness Temperature	-76.0 °F	-60.0 °C	ASTM D746
Vicat Softening Temperature	268 °F	131 °C	ASTM D1525
Melting Temperature (DSC)	271 °F	133 °C	Dow Method
Peak Crystallization Temperature (DSC)	250 °F	121 °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 Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

