



DOW™ LLDPE DNDA-7144 NT 7

Linear Low Density Polyethylene Resin

Overview

- Injection molding
- Large industrial containers and trash cans
- Excellent low temperature impact strength, rigidity, stress crack resistance and processability
- Very narrow molecular weight distribution
- Complies with
 - U.S. FDA 21 CFR 177.1520 (c)3.1a
 - CANDIAN HPFB NO OBJECTION (WITH LIMITATIONS)
 - EU, No 10/2011
 - U.S. FDA -DMF
 - Consult the regulations for complete details.

DOW DNDA-7144 NT 7 Linear Low Density Polyethylene (LLDPE) Resin is produced using UNIPOL™ PE Process Technology and is intended for use in injection molding applications such as large industrial containers and trash cans. This resin has been designed to have excellent impact strength, rigidity, environmental stress crack resistance and processability.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.924 g/cm ³	0.924 g/cm ³	ASTM D792
Base Density ¹	0.924 g/cm ³	0.924 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	20 g/10 min	20 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	20.0 hr	20.0 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	1700 psi	11.7 MPa	
Break	1100 psi	7.58 MPa	
Tensile Elongation			ASTM D638
Yield	3.0 %	3.0 %	
Break	60 %	60 %	
Flexural Modulus - 2% Secant	56000 psi	386 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ²	80.0 ft·lb/in ²	168 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	50	50	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	109 °F	42.8 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	201 °F	93.9 °C	ASTM D1525
Melting Temperature (DSC)	253 °F	123 °C	Dow Method
Peak Crystallization Temperature (DSC)	226 °F	108 °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.

² Type S

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