



# DOW™ LLDPE DNDB-7147 NT 7

## Linear Low Density Polyethylene Resin

### Overview

DNDB-7147 NT 7 Linear Low Density Polyethylene (LLDPE) Resin is produced using UNIPOL™ PE Process Technology and is intended for use in injection molded applications such as food containers, housewares and lids. This resin has been designed to have an excellent balance of impact strength, rigidity, environmental stress crack resistance and processability.

Main Characteristics :

- Injection molding
- 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.
- Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.926 g/cm <sup>3</sup>	0.926 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	50 g/10 min	50 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	5.00 hr	5.00 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	1400 psi	9.65 MPa	
Break	1100 psi	7.58 MPa	
Tensile Elongation			ASTM D638
Yield	3.0 %	3.0 %	
Break	120 %	120 %	
Flexural Modulus - 2% Secant	61000 psi	421 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength <sup>1</sup>	90.0 ft-lb/in <sup>2</sup>	189 kJ/m <sup>2</sup>	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	52	52	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	113 °F	45.0 °C	
Brittleness Temperature	-105 °F	-76.1 °C	ASTM D746
Vicat Softening Temperature	194 °F	90.0 °C	ASTM D1525
Melting Temperature (DSC)	255 °F	124 °C	Dow Method
Peak Crystallization Temperature (DSC)	228 °F	109 °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.

<sup>1</sup> Type S

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