



DOW™ LLDPE DNDB-7147 NT 7

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

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.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 3.1a	• HPFB (Canada) No Objection ¹
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ²

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.928		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	50	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F, 100% Igepal, F50	5.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	1400	psi	ASTM D638
Tensile Strength (Break)	1100	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus - 2% Secant	61000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ³	90.0	ft·lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	52		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	113	°F	ASTM D648
Brittleness Temperature	-105	°F	ASTM D746
Vicat Softening Temperature	194	°F	ASTM D1525
Melting Temperature (DSC)	255	°F	Internal Method
Peak Crystallization Temperature (DSC)	228	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976

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Notes

¹ With limitations

² Typical properties: these are not to be construed as specifications.

³ Type S