



DOW™ LLDPE DNDB-1077 NT 7

Linear Low Density Polyethylene Resin

Overview

- Injection molding
- Lids
- Excellent processability with good low temperature impact strength
- Very narrow molecular weight distribution
- Complies with U.S. FDA 21 CFR 177.1520 (c)3.1a
- Complies with CANADIAN HPFB NO OBJECTION (With Limitations)
- Complies with EU, No 10/2011
- Consult the regulations for complete details.

DOW DNDB-1077 NT 7 Linear Low Density Polyethylene (LLDPE) Resin is produced using UNIPOL™ PE Process Technology and is intended for highspeed injection molding of thin-walled parts such as downgauged lids. This resin has been designed to have an excellent balance of processability and impact strength.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.929 g/cm ³	0.929 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	100 g/10 min	100 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	< 1.00 hr	< 1.00 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	1600 psi	11.0 MPa	
Break	1200 psi	8.27 MPa	
Tensile Elongation			ASTM D638
Yield	2.0 %	2.0 %	
Break	120 %	120 %	
Flexural Modulus - 2% Secant	76000 psi	524 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹	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)	53	53	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	117 °F	47.2 °C	
Brittleness Temperature	-22.0 °F	-30.0 °C	ASTM D746
Vicat Softening Temperature	205 °F	96.1 °C	ASTM D1525
Melting Temperature (DSC)	259 °F	126 °C	Dow Method
Peak Crystallization Temperature (DSC)	234 °F	112 °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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