



DOW™ LLDPE DNDA-7144 NT 7

The Dow Chemical Company - Linear Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- 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.

General

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

ASTM & ISO Properties²

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.926		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	20	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F, 100% Igepal, F50	20.0	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	1700	psi	ASTM D638
Tensile Strength (Break)	1100	psi	ASTM D638
Tensile Elongation (Yield)	3.0	%	ASTM D638
Tensile Elongation (Break)	60	%	ASTM D638
Flexural Modulus - 2% Secant	56000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ³	80.0	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	50		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	109	°F	ASTM D648
Brittleness Temperature	< -105	°F	ASTM D746
Vicat Softening Temperature	201	°F	ASTM D1525

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Thermal	Nominal Value	Unit	Test Method
Melting Temperature (DSC)	253	°F	Internal Method
Peak Crystallization Temperature (DSC)	226	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

Notes

¹ With limitations

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

³ Type S