



DOW™ HDPE DMDA-8907 NT 7

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOW DMDA-8907 NT 7 High Density Polyethylene (HDPE) Resin is produced via UNIPOL™ Process Technology from Dow and is intended for use in injection molding applications such as pails, industrial parts and other shipping containers. This resin has been designed to provide excellent processability for molders and to meet the rigorous performance characteristics of applications requiring stackability, environmental stress crack resistance and impact strength.

- Injection molding
- For injection molded pails, industrial parts and other shipping containers
- Excellent impact strength, stress crack resistance and processability
- Very narrow molecular weight distribution

Complies with:

- U.S. FDA 21 CFR 177.1520 (c)3.2a
- Canadian HPFB No Objection
- EU, No 10/2011
- U.S. USP
- U.S. FDA DMF

Consult the regulations for complete details.

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Additive	• Antiblock: No • Processing Aid: No • Slip: No
Agency Ratings	• DMF Unspecified Rating • FDA 21 CFR 177.1520(c) 3.2a • USP Unspecified Rating • EU No 10/2011 • HPFB (Canada) No Objection
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.954		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	6.8	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F, 100% Igepal, F50	12.0	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	3900	psi	ASTM D638
Tensile Strength (Break)	3300	psi	ASTM D638
Tensile Elongation (Yield)	7.0	%	ASTM D638
Tensile Elongation (Break)	1100	%	ASTM D638
Flexural Modulus - 2% Secant	155000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ²	40.0	ft·lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	59		ASTM D2240

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	163	°F	ASTM D648
Brittleness Temperature	< -105	°F	ASTM D746
Vicat Softening Temperature	262	°F	ASTM D1525
Melting Temperature (DSC)	268	°F	Internal Method
Peak Crystallization Temperature (DSC)	244	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D4976.

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type S