



## DOW™ HDPE DMDA-8907 NT 7 High Density Polyethylene Resin

### Overview

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.

### Additive

- Antiblock: No
- Slip: No
- Processing Aid: No

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.952 g/cm <sup>3</sup>	0.952 g/cm <sup>3</sup>	ASTM D792
Melt Index (190°C/2.16 kg)	6.8 g/10 min	6.8 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	12.0 hr	12.0 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield	3900 psi	26.9 MPa	
Break	3300 psi	22.8 MPa	
Tensile Elongation			ASTM D638
Yield	7.0 %	7.0 %	
Break	1100 %	1100 %	
Flexural Modulus - 2% Secant	155000 psi	1070 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength <sup>1</sup>	40.0 ft·lb/in <sup>2</sup>	84.1 kJ/m <sup>2</sup>	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	59	59	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	163 °F	72.8 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	262 °F	128 °C	ASTM D1525
Melting Temperature (DSC)	268 °F	131 °C	Dow Method
Peak Crystallization Temperature (DSC)	244 °F	118 °C	Dow Method

### Additional Information

Plaque molded and tested in accordance with ASTM D4976.