



Technical Data Sheet

DOW™ HDPE DMDA-8940 NT 7 High Density Polyethylene Resin

Description

DOW™ DMDA-8940 NT 7 High Density Polyethylene (HDPE) Resin is produced via UNIPOL™ Process Technology from Dow and is intended for use in a broad range of injection molding applications such as housewares, toys, food containers and pails. This resin has been designed to provide an excellent balance of toughness, environmental stress crack resistance and processability.

Main Characteristics

- Injection molding
- For injection molded housewares, toys, food containers and pails
- Excellent balance of toughness, stress crack resistance and processability
- Very narrow molecular weight distribution

Complies with

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

Consult the regulations for complete details.

Additive

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

Properties¹

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method ²
Density	0.951	g/cm ³	0.951	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	44	g/10min	44	g/10min	ASTM D1238
Mechanical					
Tensile Strength					ASTM 638
Yield	3900	Psi	26.9	MPa	
Break	3900	Psi	26.9	MPa	
Tensile Elongation					ASTM 638
Yield	5.0	%	5.0	%	
Break	10	%	10	%	
Flexural Modulus – 2% Secant	148000	Psi	1020	MPa	ASTM D790B

1. Typical properties: these are not to be construed as specifications. Users should confirm results by their own tests.
2. ASTM: American Society for Testing and Materials



Properties (Cont.)

Impact	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Tensile Impact Strength ³	40.0	ft-lb/in ²	84.1	kJ/m ²	ASTM D1822
Hardness					
Durometer Hardness (Shore D)	64		64		ASTM D2240
Thermal					
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	160	°F	71.1	°C	ASTM D648
Brittleness Temperature	-98.0	°F	-72.2	°C	ASTM D746
Vicat Softening Temperature	253	°F	123	°C	ASTM D1525
Melting Temperature (DSC)	262	°F	128	°C	Internal Method
Peak Crystallization Temperature (DSC)	241	°F	116	°C	Internal Method
Additional Information					
Plaque molded and tested in accordance with ASTM D4976					

3. Type S

