

DOW DMDA-8920 NT 7

High Density Polyethylene Resin

- 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)3.1a
Consult the regulations for complete details.

DOW DMDA-8920 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.

Physical Properties	Test Method	Values ⁽¹⁾ English (SI)
Resin Properties		
Melt Index (I ₂) @190°C/2.16 kg, g/10 min	ASTM D 1238	20
Density, g/cm ³	ASTM D 792	0.954
DSC Melting Point, °F (°C)	Dow Method	266 (130)
DSC Crystallization Point, °F (°C)	Dow Method	243 (117)
Vicat Softening Point, °F (°C)	ASTM D 1525	261 (127)
Molded Plaque Properties⁽²⁾		
Hardness, Shore D	ASTM D 2240	57
Flexural Modulus, 2% Secant, psi (MPa)	ASTM D 790 B	167,000 (1151)
Tensile Strength at Break, psi (MPa)	ASTM D 638	2000 (14)
Tensile Strength at Yield, psi (MPa)	ASTM D 638	4100 (28)
Tensile Elongation at Break, %	ASTM D 638	250
Tensile Elongation at Yield, %	ASTM D 638	7
Tensile Impact Strength, ft-lb/in. ² (kJ/m ²)	ASTM D 1822, Type S	20 (42)
Environmental Stress Crack Resistance, 122°F (50°C), F ₅₀ , 100% Igepal [®] , hrs.	ASTM D 1693	3
Brittleness Temperature, °F (°C)	ASTM D 746	<-105 (<-76)
Deflection Temperature Under Load @ 66 psi (0.45 MPa), °F (°C)	ASTM D 648	163 (73)

- (1) Typical values, not to be construed as specifications. Users should confirm results by their own tests.
(2) Molded and tested in accordance with ASTM D4976.

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- c. use as a critical component in medical devices that support or sustain human life; or
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