



DOW™ HDPE DMDA-8920 NT 7

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- 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
- Complies with U.S. FDA - DMF
- Complies with Canadian HPFB No Objection
- Complies EU, No 10/2011
- 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.

General

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

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.956		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	3.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	4100	psi	ASTM D638
Tensile Strength (Break)	2000	psi	ASTM D638
Tensile Elongation (Yield)	7.0	%	ASTM D638
Tensile Elongation (Break)	250	%	ASTM D638
Flexural Modulus - 2% Secant	167000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength ²	20.0	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	57		ASTM D2240
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	261	°F	ASTM D1525
Melting Temperature (DSC)	266	°F	Internal Method

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Thermal	Nominal Value	Unit	Test Method
Peak Crystallization Temperature (DSC)	243	°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