



DOW™ HDPE DMDB-7950 NT 7 High Density Polyethylene Resin

Overview

- Injection molding
- Roll-out trash carts and other large parts
- Excellent impact strength, stress crack resistance and processability
- Very narrow molecular weight distribution

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.1a
- Canadian HPFB No Objection
- European Commission Regulation (EU) No 10/2011

Consult the regulations for complete details.

DOW DMDB-7950 NT 7 High Density Polyethylene (HDPE) Resin is intended for use in injection molding applications such as roll-out trash carts and other large parts with short molding cycles. It is produced via UNIPOL™ Process Technology from Dow and has been designed to meet the rigorous performance characteristics of impact resistance, environmental stress crack resistance, stiffness, and low warpage, while maintaining excellent moldability.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.948 g/cm ³	0.948 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	5.8 g/10 min	5.8 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F (50°C), 100% Igepal, F50	40.0 hr	40.0 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, Compression Molded	3600 psi	24.8 MPa	
Break, Compression Molded	3800 psi	26.2 MPa	
Tensile Elongation			ASTM D638
Yield, Compression Molded	8.0 %	8.0 %	
Break, Compression Molded	1200 %	1200 %	
Flexural Modulus - 2% Secant (Compression Molded)	146000 psi	1010 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength ¹ (Compression Molded)	50.0 ft-lb/in ²	105 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D)	54	54	ASTM D2240
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed, Compression Molded	154 °F	67.8 °C	
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	261 °F	127 °C	ASTM D1525
Melting Temperature (DSC)	266 °F	130 °C	Dow Method
Peak Crystallization Temperature (DSC)	244 °F	118 °C	Dow Method

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Type S

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