DOW™ HDPE DMDC-7950 NT 7

High Density Polyethylene Resin

The Dow Chemical Company

Technical Data

Product Description

DOW DMDC-7950 NT 7 High Density Polyethylene (HDPE) Resin is intended for use in injection molding applications requiring a UV stabilization package 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.

- Injection molding
- Roll-out trash carts and other large parts
- UV stabilized
- 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

Consult the regulations for complete details.

General

Material Status	• Commercial: Active
Literature [1]	• Technical Datasheet
Search for UL Yellow Card	• The Dow Chemical Company
Availability	• North America
Agency Ratings	• FDA 21 CFR 177.1520(c) 3.1a
Forms	• Pellets

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.948	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	5.8	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			ASTM D1693
50°C, 100% Igepal, F50	60.0	hr	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength			ASTM D638
Yield, Compression Molded	22.1	MPa	
Break, Compression Molded	25.5	MPa	
Tensile Elongation			ASTM D638
Yield, Compression Molded	20	%	
Break, Compression Molded	2100	%	
Flexural Modulus - 2% Secant (Compression Molded)	965	MPa	ASTM D790B
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	60		ASTM D2240
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, Compression Molded	68.3	°C	
Brittleness Temperature	< -76.1	°C	ASTM D746
Vicat Softening Temperature	123	°C	ASTM D1525
Melting Temperature (DSC)	132	°C	Internal Method
Peak Crystallization Temperature (DSC)	116	°C	Internal Method

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] Typical properties: these are not to be construed as specifications.