DOW™ HDPE DMDA-8007 NT 7

High Density Polyethylene Resin

The Dow Chemical Company

Technical Data

Product Description

- Excellent stiffness/modulus
- Excellent warp resistance
- Molded parts have high gloss, low odor
- For injection molded crates, cases, totes, and other parts needing high modulus
- Complies with U.S. FDA 21 CFR 177.1520 (c)2.2
- Complies with Canadian HPFB No Objection
- Complies with EU, No 10/2011
- Consult the regulations for complete details.

DOW DMDA-8007 NT 7 High Density Polyethylene (HDPE) Resin is a narrow molecular weight distribution high density homopolymer designed to offer excellent stiffness, low warpage, good/acceptable toughness, and good moldability. This resin is ideally suited for injection molded crates, cases, trays, tote bins, and other objects requiring high rigidity. This resin is also suitable for cast film extrusion processing.

General

Material Status	• Commercial: Active		
Literature [1]	• Technical Datasheet		
Search for UL Yellow Card	• The Dow Chemical Company		
Availability	• Asia Pacific	• Latin America	• North America
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520(c) 2.2	• HPFB (Canada) No Objection
Forms	• Pellets		
Processing Method	• Cast Film	• Injection Molding	

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.965	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	8.3	g/10 min	
190°C/21.6 kg	180	g/10 min	
Environmental Stress-Cracking Resistance [3]			ASTM D1693
50°C, 100% Igepal, F50	2.00	hr	

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength [3]			ASTM D638
Yield	31.0	MPa	
Break	17.9	MPa	
Tensile Elongation [3]			ASTM D638
Yield	6.0	%	
Break	350	%	
Flexural Modulus - 2% Secant [3]	1410	MPa	ASTM D790B

Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	25	µm	
Film Puncture Resistance (25 µm)	0.579	J/cm³	Internal Method
Secant Modulus			ASTM D882
2% Secant, MD: 25 µm, Cast Film	798	MPa	
2% Secant, TD: 25 µm, Cast Film	935	MPa	
Tensile Strength			ASTM D882
MD: Yield, 25 µm, Cast Film	20.4	MPa	
TD: Yield, 25 µm, Cast Film	22.4	MPa	
Tensile Elongation			ASTM D882
MD: Break, 25 µm, Cast Film	670	%	
TD: Break, 25 µm, Cast Film	490	%	
Dart Drop Impact (25 µm, Cast Film)	24	g	ASTM D1709A