



DOW™ HDPE DMDC-1210 NT 7

The Dow Chemical Company - High Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOW™ DMDC-1210 NT 7 High Density Polyethylene Resin is intended for use in both compression and injection molded closure applications. This resin has been designed to meet demanding performance requirements, especially in the areas of stiffness, impact strength, and sensory, while maintaining good processing characteristics beneficial to molders. Typical applications include injection molded closures for water bottles, where minimizing the contribution of the package to the taste of the product is a requirement.

Main Characteristics:

- Excellent Stiffness and Impact Strength
- Excellent Organoleptic Properties
- Excellent Processing Characteristics

Complies with:

- U.S. FDA 21 CFR 177.1520(c)3.1a.
- Canadian HPFB No Objection
- EU, No 10/2011
- Consult the regulations for complete details

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Additive	• Antiblock: No • Processing Aid: No • Slip: No
Agency Ratings	• EU No 10/2011 • FDA 21 CFR 177.1520(c) 3.1a • HPFB (Canada) No Objection
Forms	• Pellets

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.954		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	10	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
122°F, 10% Igepal, F50	12.0	hr	
122°F, 100% Igepal, F50	22.0	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	3960	psi	ASTM D638
Tensile Strength (Break)	2970	psi	ASTM D638
Tensile Elongation (Yield)	13	%	ASTM D638
Tensile Elongation (Break)	1500	%	ASTM D638
Flexural Modulus - 2% Secant	152000	psi	ASTM D790
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	59		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	257	°F	ASTM D1525
Melting Temperature (DSC)	266	°F	Internal Method

Additional Information

Plaque molded and tested in accordance with ASTM D 4976.

DOW™ HDPE DMDC-1210 NT 7

The Dow Chemical Company - High Density Polyethylene Resin

Notes

¹ Typical properties: these are not to be construed as specifications.