DOW™ MDPE DMDA-8962 NT 7
Medium Density Polyethylene Resin

Overview

DOW DMDA-8962 NT 7 Medium Density Polyethylene (MDPE) resin is produced via UNIPOL™ Process Technology from Dow and is intended for use in thin-wall injection molding applications such as food containers, including freezer applications. This resin has been designed to provide a good impact/stiffness balance as well as excellent processability.

Main Characteristics:

- Injection molding resin
- Good impact/stiffness balance for freezer applications
- High flow for processing ease
- Very narrow molecular weight distribution

Complies with

- U.S. FDA 21 CFR 177.1520(c)3.2a
- CANADIAN HPFB NO OBJECTION (WITH LIMITATIONS)
- EU, No 10/2011
- Consult the regulations for complete details.

Additive

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

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.942	g/cm³	0.942	g/cm³	ASTM D792
Base Density [1]	0.942	g/cm³	0.942	g/cm³	Dow Method
Melt Index (190°C/2.16 kg)	62	g/10 min	62	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)					ASTM D1693
122°F (50°C), 100% Igepal, F50	6.00	hr	6.00	hr	
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength					ASTM D638
Yield	2100	psi	14.5	MPa	
Break	2700	psi	18.6	MPa	
Tensile Elongation					ASTM D638
Yield	9.0	%	9.0	%	
Break	37	%	37	%	
Flexural Modulus - 2% Secant	120000	psi	827	MPa	ASTM D790B
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Impact Strength [2]	43.0	ft·lb/in²	90.4	kJ/m²	ASTM D1822
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Brittleness Temperature	-63.0	°F	-52.8	°C	ASTM D746
Melting Temperature (DSC)	260	°F	127	°C	Dow Method
Peak Crystallization Temperature (DSC)	239	°F	115	°C	Dow Method
Additional Information					
Molded and tested in accordance with ASTM D4976.					

Notes

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

[1] Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

[2] Type S

Form No. 400-00155027en
Rev: 2017-04-13

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Published: 2011-10-12

Form No. 400-00155027en
Rev: 2017-04-13