



DOW™ MDPE DPDA-3152 NT 7

The Dow Chemical Company - Medium Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

DOW™ DPDA-3152 NT 7 Medium Density Polyethylene (MDPE) Resin is produced via UNIPOL™ Process Technology from Dow and is intended for rotational and injection molding. It is specifically designed for applications requiring excellent processability and aesthetics combined with low warpage and good mechanical properties.

Processing and Stabilization: DOW DPDA-3152 NT 7 MDPE Resin is fully heat and UV stabilized resulting in a wide processing latitude, good color retention and long life expectancy.

- Rotational molding or injection molding
- For intermediate bulk containers, toys, general purpose custom molding, agricultural storage tanks, water tanks, marine parts, indoor consumer articles
- Excellent impact strength, stress crack resistance and processability
- Long term UV stabilization: UV-8 stabilizer package

Complies with:

- U.S. FDA 21 CFR 177.1520 (c)3.1a
- Canadian HPFB No Objection
- Underwriters Laboratories, Inc.
- NSF International NSF/ANSI Std 61 (sec 4 & 5)

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	• FDA 21 CFR 177.1520(c) 3.1a	• NSF STD-61	
	• HPFB (Canada) No Objection	• UL Unspecified Rating	
Forms	• Pellets		
Processing Method	• Injection Molding	• Rotational Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.937		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	5.2	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) ²			ASTM D1693
122°F, 10% Igepal, F50	> 982	hr	
122°F, 100% Igepal, F50	> 1000	hr	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	2720	psi	ASTM D638
Flexural Modulus - 1% Secant ²	95000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°F, 0.125 in, Rotational Molded	59	ft-lb	
-40°F, 0.250 in, Rotational Molded	188	ft-lb	

DOW™ MDPE DPDA-3152 NT 7

The Dow Chemical Company - Medium Density Polyethylene Resin

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ² (66 psi, Unannealed)	125	°F	ASTM D648
Deflection Temperature Under Load ² 264 psi, Unannealed	95.0	°F	ASTM D648
Melting Temperature (DSC)	257	°F	Internal Method

Notes

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

² Plaque molded and tested in accordance with ASTM D4976.