



DOW™ MDPE DPDA-3152 NT 7 Medium Density Polyethylene Resin

Overview

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.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.935 g/cm ³	0.935 g/cm ³	ASTM D792
Base Density ¹	0.935 g/cm ³	0.935 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	5.2 g/10 min	5.2 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) ²			ASTM D1693
122°F (50°C), 10% Igepal, F50	> 982 hr	> 982 hr	
122°F (50°C), 100% Igepal, F50	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	2720 psi	18.8 MPa	ASTM D638
Flexural Modulus - 1% Secant ²	95000 psi	655 MPa	ASTM D790B
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
-40°F (-40°C), 0.125 in (3.18 mm), Rotational Molded	59 ft·lb	80 J	
-40°F (-40°C), 0.250 in (6.35 mm), Rotational Molded	188 ft·lb	255 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load ²			ASTM D648
66 psi (0.45 MPa), Unannealed	125 °F	51.7 °C	
264 psi (1.8 MPa), Unannealed	95.0 °F	35.0 °C	
Melting Temperature (DSC)	257 °F	125 °C	Dow Method

