RESILITY™ DPDB-3152 NT 7
Medium Density Polyethylene Resin

Overview

RESILITY™ DPDB-3152 NT 7 Medium Density Polyethylene (MDPE) Resin is produced via UNIPOLTM 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: RESILITY™ DPDB-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-20+ stabilizer package

Complies with:

- U.S. FDA 21 CFR 177.1520 (c)3.1a (with restrictions)
- European Commission Regulation (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	0.935	g/cm³	0.935	g/cm³	ASTM D792
Base Density [1]	0.935	g/cm³	0.935	g/cm³	Dow Method
Melt Mass-Flow Rate (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), 100% Igepal, F50	> 1000	hr	> 1000	hr	
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Strength [2] (Yield)	2730	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), 0.250 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	124	°F	51.1	°C	
264 psi (1.8 MPa), Unannealed	100	°F	37.8	°C	
Melting Temperature (DSC)	258	°F	126	°C	Dow Method

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] Plaque molded and tested in accordance with ASTM D4976.

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