



Technical Data Sheet

RESILITY™ DPDB-3170 NT 7 Medium Density Polyethylene Resin

Overview

RESILITY™ DPDB-3170 NT 7 Medium Density Polyethylene (MDPE) Resin is produced via UNIPOL™ Process Technology from Dow and is intended for rotational and injection molding and is specifically designed for applications requiring excellent processability and aesthetics combined with low warpage and good mechanical properties.

Processing and Stabilization: RESILITY™ DPDB-3170 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)
- EU No 10/2011
- REACH
- NSF51 and NSF 61
- UL94 HB, UL746C fl
- FMVSS 302

Consult the regulations for complete details.

Additive

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



Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.935	g/cm ³	0.935	g/cm ³	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	7.0	g/10 min	7.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) ² 122°F (50°C), 100% Igepal, F50	> 1000	hr	> 1000	hr	ASTM D1693A
Mechanical					
Tensile Strength ² (Yield)	2840	psi	19.6	MPa	ASTM D638
Tensile Elongation ² (Yield)	12	%	12	%	ASTM D638
Flexural Modulus - 1% Secant ²	93000	psi	641	MPa	ASTM D790B
Impact					
Impact Strength -40°F (-40°C), 0.250 in (6.35 mm), Rotational Molded	170	ft•lb	230	J	ARM
Thermal					
Deflection Temperature Under Load ² 66 psi (0.45 MPa), Unannealed	125	°F	51.7	°C	ASTM D648
264 psi (1.8 MPa), Unannealed	101	°F	38.3	°C	
Melting Temperature (DSC)	258	°F	126	°C	Dow Method

