Technical Data Sheet

RESILITY™ DPDB-3162 NT 7 Medium Density Polyethylene Resin

Overview

RESILITY™ DPDB-3162 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: RESILITY™ DPDB-3162 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
- REACH
- NSF51 and NSF 61
- UL94 HB, UL746C

Consult the regulations for complete details.

Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method[1]
Density	0.940	g/cm^3	0.940	g/cm^3	ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	6.2	g/10 min	6.2	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)[2]					ASTM D1693
122°F (50°C), 10% Igepal, F50	19.0	hr	19.0	hr	
122°F (50°C), 100% Igepal, F50	28.0	hr	28.0	hr	

Properties (Cont.)

Mechanical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Tensile Strength[2] (Yield)	3360	psi	23.2	MPa	ASTM D638
Tensile Elongation (Yield)	11	%	11	%	ASTM D638
Flexural Modulus - 1% Secant[2]	119000	psi	822	MPa	ASTM D790B
Impact					
Impact Strength					ARM
-40°F (-40°C), 0.250 in (6.35 mm), Rotational Molded	185	ft•lb	251	J	
Thermal					
Deflection Temperature Under Load[2]					ASTM D648
66 psi (0.45 MPa), Unannealed	133	°F	56.1	°C	
264 psi (1.8 MPa), Unannealed	101	°F	38.3	°C	
Melting Temperature (DSC)	258	°F	126	°C	Dow Method