



DOW™ MDPE DPDA-3135 NT 7 Medium Density Polyethylene Resin

Overview

DOW™ DPDA-3135 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-3135 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.
- EU, 10/2011
- 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 | 0.938 g/cm ³ | 0.938 g/cm ³ | ASTM D792 |
| Base Density ¹ | 0.938 g/cm ³ | 0.938 g/cm ³ | Dow Method |
| Melt Index (190°C/2.16 kg) | 3.5 g/10 min | 3.5 g/10 min | ASTM D1238 |
| Environmental Stress-Cracking Resistance (ESCR) ² | | | ASTM D1693 |
| 10% Igepal, F50 | > 89.0 hr | > 89.0 hr | |
| 100% Igepal, F50 | > 1000 hr | > 1000 hr | |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength ² (Yield) | 2930 psi | 20.2 MPa | ASTM D638 |
| Flexural Modulus - 1% Secant ² | 104000 psi | 717 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 | 60 ft·lb | 81 J | |
| -40°F (-40°C), 0.250 in (6.35 mm), Rotational Molded | 186 ft·lb | 252 J | |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| 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) | 260 °F | 127 °C | Dow Method |

