



DOW™ LDPE PG 7008 (Durables) Low Density Polyethylene Resin

Overview

DOW LDPE™ PG 7008 Polyethylene Resin from Dow has been designed to exhibit good processability, balanced physical properties, good rigidity and surface gloss, and excellent organoleptics when it is properly injection moulded.

Complies with:

- U.S. FDA 21 CFR 177.1520(c)2.2
- EU, No 10/2011
- Canadian HPFB No Objection

Consult the regulations for complete details.

Applications:

- Housewares
- Toys
- Containers
- Caps

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.918 g/cm ³	0.918 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	7.7 g/10 min	7.7 g/10 min	ISO 1133
Spiral Flow ^{1,2}	41.3 in	105 cm	Dow Method
Molding Shrinkage - Flow ³ (428°F (220°C))	0.026 in/in	2.6 %	ASTM D955
Environmental Stress-Cracking Resistance (ESCR) ⁴			ASTM D1693
122°F (50°C), 0.5% AntaroX, Compression Molded	9.20 hr	9.20 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, Compression Molded	1310 psi	9.00 MPa	
Break, Compression Molded	1450 psi	10.0 MPa	
Tensile Elongation			ASTM D638
Break, Compression Molded	350 %	350 %	
Flexural Modulus - 2% Secant (Compression Molded)	29000 psi	200 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength (Compression Molded)	69.0 ft-lb/in ²	145 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore D, Compression Molded	50	50	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	192 °F	89.0 °C	ISO 306/A

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Melt Temperature: 428°F (220°C)

² 2 seconds injection.

³ 0.5 seconds injection.

⁴ Notched

