



DOW™ HDPE 25055E

High Density Polyethylene Resin

Overview

POLYETHYLENE HIGH DENSITY 25055E High Density Polyethylene Resin is a very narrow molecular weight distribution resin, developed to impart excellent mechanical properties, high gloss and high surface finishing to injection moulded parts, while providing easy processing.

Applications:

- Housewares
- Food containers
- Toys

Complies with:

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

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.955 g/cm ³	0.955 g/cm ³	ASTM D792
Melt Index			ISO 1133
190°C/2.16 kg	25 g/10 min	25 g/10 min	
190°C/5.0 kg	62 g/10 min	62 g/10 min	
Spiral Flow ^{1,2}	42.9 in	109 cm	Dow Method
Molding Shrinkage - Flow	0.021 in/in	2.1 %	ASTM D955
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
100% AntaroX CO-630, Compression Molded	0.700 hr	0.700 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			ASTM D638
Yield, Compression Molded	3630 psi	25.0 MPa	
Break, Compression Molded	3920 psi	27.0 MPa	
Tensile Elongation			ASTM D638
Break, Compression Molded	200 %	200 %	
Flexural Modulus - 2% Secant (Compression Molded)	126000 psi	870 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Impact Strength (Compression Molded)	26.2 ft·lb/in ²	55.0 kJ/m ²	ASTM D1822
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, Compression Molded)	65	65	ISO 868
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	255 °F	124 °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: 482°F (250°C)

² 2 seconds injection

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