

DOW™ HDPE 25055E

High Density Polyethylene Resin
The Dow Chemical Company

Technical Data

Product Description

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.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet		
Search for UL Yellow Card	• The Dow Chemical Company		
Availability	• Europe		
Agency Ratings	• EU No 10/2011	• FDA 21 CFR 177.1520	• HPFB (Canada) No Objection ²
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.953 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR)		ISO 1133
190°C/2.16 kg	25 g/10 min	
190°C/5.0 kg	62 g/10 min	
Spiral Flow ^{4, 5}	109 cm	Internal Method
Molding Shrinkage - Flow	2.1 %	ASTM D955
Environmental Stress-Cracking Resistance		ASTM D1693
100% Antarox CO-630, Compression Molded	0.700 hr	

Mechanical	Nominal Value Unit	Test Method
Tensile Strength		ASTM D638
Yield, Compression Molded	25.0 MPa	
Break, Compression Molded	27.0 MPa	
Tensile Elongation		ASTM D638
Break, Compression Molded	200 %	
Flexural Modulus - 2% Secant (Compression Molded)	870 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Tensile Impact Strength (Compression Molded)	55.0 kJ/m ²	ASTM D1822

Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, Compression Molded)	65	ISO 868

Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature	124 °C	ISO 306/A