



DOW™ Ultra-Pure Polyethylene Resin

Description

DOW™ 2010 Ultra-Pure Polyethylene Resin is characterized by low melt index and intermediate crystallinity. This product, produced via a unique polymerization process, has outstanding flexibility and environmental stress crack resistance.

Features

Contains a mold release agent.

Applications

Injection molded parts used in medical, pharmaceutical, and personal care packaging.

Typical Properties

Physical	Nominal Value	Unit (SI)	Test Method(s) ¹	
Density	0.92	g/cm ³	ASTM D792	ISO 1183
Melt Flow Index (190°C/2.16 kg)	1.9	g/10 min	ASTM D1238	ISO 1133
Thermal	Nominal Value	Unit (SI)	Test Method(s)	
Melting Point (DSC)	109 (228.2)	°C (°F)	ASTM D3418	ISO 3146
Freezing Point (DSC)	96 (204.8)	°C (°F)	ASTM D3418	ISO 3146
Vicat Softening Point	96 (204.8)	°C (°F)	ASTM D1525	ISO 306

1. ASTM: American Society for Testing and Materials
ISO: International Standardization Organization

Maximum Processing Temperature

310°C (590°F)

General Processing Information

DOW™ 2010 Ultra-Pure Polyethylene Resin is normally processed at melt temperatures ranging from 180–235°C (356–455°F). Actual processing temperatures will usually be determined by optimizing product appearance and production rates on individual production lines.

Unusual materials of construction are not required in the processing of this resin due to the non-corrosive nature of DOW™ 2010 Ultra-Pure Polyethylene Resin. For long equipment life, a wear-resistant extruder barrel is recommended. Nickel or chrome plating of the screw, adapter, and die parts is also recommended.

