DOWLEX™ HMS 8017
Linear Low Density Polyethylene Resin

Overview DOWLEX HMS 8017 Polyethylene Resin is a Linear Low Density Polyethylene, 1-Octene Copolymer produced in Dow.

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

Physical	Nominal Value (English)		Nominal Value (SI)		Test Method
Density	0.918	g/cm³	0.918	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	0.75	g/10 min	0.75	g/10 min	ASTM D1238
Films	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Film Thickness - Tested	2.0	mil	51	µm	
Secant Modulus					ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	24400	psi	168	MPa	
2% Secant, TD : 2.0 mil (51 µm)	25500	psi	176	MPa	
Tensile Strength					ASTM D882
MD : Yield, 2.0 mil (51 µm)	1510	psi	10.4	MPa	
TD : Yield, 2.0 mil (51 µm)	1540	psi	10.6	MPa	
MD : Break, 2.0 mil (51 µm)	7140	psi	49.2	MPa	
TD : Break, 2.0 mil (51 µm)	6270	psi	43.2	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.0 mil (51 µm)	630	%	630	%	
TD : Break, 2.0 mil (51 µm)	730	%	730	%	
Dart Drop Impact (2.0 mil (51 µm))	420	g	420	g	ASTM D1709A
Elmendorf Tear Strength					ASTM D1922
MD : 2.0 mil (51 µm)	790	g	790	g	
TD : 2.0 mil (51 µm)	1100	g	1100	g	
Thermal	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Melting Temperature	250	°F	121	°C	DSC
Optical	**Nominal Value (English)**		**Nominal Value (SI)**		**Test Method**
Gloss (45°, 2.01 mil (51.0 µm))	82		82		ASTM D2457
Haze (2.01 mil (51.0 µm))	8.4	%	8.4	%	ASTM D1003

Extrusion Notes

Fabrication Conditions for Blown Film:
- Screw size: 2.3 in (60 mm); 32:1 ratio L/D
- Die gap: 70 mil (1.8 mm)
- Melt temperature 428°F (220°C)
- Output: 50 kg/h
- Die Diameter: 5.9 in (150 mm)
- Blow-up ratio: 2.5:1
- Screw speed: 60 rpm
- Frost line height: 19.7 in (50 cm)

Notes

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