



AGILITY™ 1023 Performance LDPE

Low Density Polyethylene Resin

Overview

AGILITY™ 1023 Performance LDPE is used in clarity packaging with good stiffness neat and in blends with LLDPE for industrial and food packaging applications.

Main Characteristics:

- High optics for sparkling packages
- Good stiffness
- Excellent processability

Complies with:

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

Consult the regulations for complete details

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.925 g/cm ³	0.925 g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	1 mil	32 µm	
Film Puncture Resistance (1.3 mil (32 µm))	45.0 ft·lb/in ³	3.72 J/cm ³	Dow Method
Secant Modulus			ASTM D882
2% Secant, MD : 1.3 mil (32 µm)	30000 psi	207 MPa	
2% Secant, TD : 1.3 mil (32 µm)	34000 psi	234 MPa	
Tensile Strength			ASTM D882
MD : Yield, 1.3 mil (32 µm)	1960 psi	13.5 MPa	
TD : Yield, 1.3 mil (32 µm)	1960 psi	13.5 MPa	
MD : Break, 1.3 mil (32 µm)	3130 psi	21.6 MPa	
TD : Break, 1.3 mil (32 µm)	2460 psi	17.0 MPa	
Tensile Elongation			ASTM D882
MD : Break, 1.3 mil (32 µm)	330 %	330 %	
TD : Break, 1.3 mil (32 µm)	550 %	550 %	
Dart Drop Impact (1.3 mil (32 µm))	66 g	66 g	ASTM D1709A
Elmendorf Tear Strength			ASTM D1922
MD : 1.3 mil (32 µm)	280 g	280 g	
TD : 1.3 mil (32 µm)	300 g	300 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 1.25 mil (31.8 µm))	78	78	ASTM D2457
Haze (1.25 mil (31.8 µm))	5.40 %	5.40 %	ASTM D1003
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	234 °F	112 °C	



Extrusion Notes

Fabrication Conditions For Blown Film:

- Screw Size: 3.5 in. (63.5 mm); 30:1 ratio L/D
- Screw Type: DSB II
- Die Gap: 40 mil (1.02 mm)
- Melt Temperature: 413°F (212°C)
- Output: 10 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5 to 1
- Screw Speed: 40 rpm
- Frost Line Height: 35 in. (889 mm)
- IBC

Notes

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

