

Technical Data Sheet

| DOWLEX™ 2045G

Overview

Linear Low Density Polyethylene

For heavy duty applications

Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.

Consult the regulations for complete details.

Description

DOWLEX™ 2045G Polyethylene Resin is designed for the production of a wide variety of industrial and consumer films. Films made from this resin exhibit a combination of excellent toughness and tear resistance. The product also delivers very good processability on conventional LLDPE machinery.

Technical Specification

Antiblock: No Slip: No Processing Aid: No Thermal Stabilizer: Yes

Properties	Typical value	Test method
Density	0.920g/cm ³	ASTM D792
Melt index	1.0g/10min (190°C/2.16kg)	ASTM D1238
Vicat softening temperature	106°C	ASTM D1525
Peak melting temperature	119°C	DOW method
Tensile strength at yield MD	11.3 Mpa	ASTM D882
Tensile strength at yield TD	11.9 Mpa	ASTM D882
Tensile strength at break MD	47.4 Mpa	ASTM D882
Tensile strength at break TD	40.6 Mpa	ASTM D882
Elongation at break MD	600%	ASTM D882

Elongation at break TD	740%	ASTM D882
Secant modulus MD - 1% secant	237 Mpa	ASTM D882
Secant modulus TD - 1% secant	275 Mpa	ASTM D882
Dart drop impact	220g	ASTM D1709A
Elmendorf tear strength MD	370g	ASTM D1922
Elmendorf tear strength TD	630g	ASTM D1922
Puncture force	62.3N	DOW method
Puncture energy	5.31J	DOW method
Gloss (45°C)	60	ASTM D2457
Haze	10%	ASTM D1003

Extrusion Notes

Fabrication Conditions For Blown Film:

Screw Size: 3.5 in.; 30:1 L/D

Screw Type: DSB II

Die Gap: 70 mil (1.8 mm)

Melt Temperature: 418°F

Output: 12 lb/hr/in. of die circumference

Die Diameter: 8 in.

Blow-Up Ratio: 2.5:1

Screw Speed: 41 rpm

Frost Line Height: 43 in.

Notes

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