Shell Polymers

18F2B
Linear Low-Density Polyethylene Resin

Technical Data Sheet (DRAFT)

Product Description

Shell Polymers 18F2B is a 2 MI-butene LLDPE blown film resin.

Highlights

- Produces films that have good drawdown, tensile and toughness
- Gas phase technology

Resin Properties	Method	Nominal Value
Density	ASTM D792	0.918 g/cm^3
Melt Index (190°C / 2.16 kg)	ASTM D1238	2.0 g/10 min

Mechanical Properties	Method	Nominal Value (English)	Nominal Value (SI)
Thickness		1.0 mil	25 µm
Tear Strength, MD	ASTM D1922	107 g	107 g
Tear Strength, TD	ASTM D1922	380 g	380 g
Dart Drop Impact	ASTM D1709	85 g	85 g
Tensile Strength at Break, MD	ASTM D882	5900 psi	41 MPa
Tensile Strength at Break, TD	ASTM D882	4500 psi	31 MPa
Tensile Strength at Yield, MD	ASTM D882	1600 psi	11 MPa
Tensile Strength at Yield, TD	ASTM D882	1600 psi	11 MPa
Tensile Elongation at Break, MD	ASTM D882	700 %	700 %
Tensile Elongation at Break, TD	ASTM D882	950 %	950 %
1% Secant Modulus, MD	ASTM D882	19600 psi	135 MPa
1% Secant Modulus, TD	ASTM D882	24200 psi	167 MPa

Optical Properties	Method	Nominal Value (English)	Nominal Value (SI)
Haze	ASTM D1003	19 %	19 %
Gloss at 45°	ASTM D2457	33	33

Thermal Properties	Method	Nominal Value (English)	Nominal Value (SI)
Vicat Softening Temperature	ASTM D1525	206 °F	97 °C
Peak Melting Temperature	ASTM D1525	250 °F	121 °C

Additives	
Thermal Stabilizer	☒

Notes

Typical properties only. Not to be construed as specifications. Users should confirm results by performing their own tests.

Processing Statement:
Film properties are typical for blown film produced on a line with 75mm screw, 250mm die diameter, and 2mm die gap. Properties will vary with process conditions.

Regulatory Statement:
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.1a or 3.2a
- Consult the Regulatory Data Sheet for more details. It is available upon request. Please contact your Account Manager.

www.shell.us/polymers