



DOW™ LDPE 4016

The Dow Chemical Company - Low Density Polyethylene Resin

Tuesday, November 5, 2019

General Information

Product Description

- A high melt index resin for high speed thin coating applications
- Complies with U.S. FDA 21 CFR 177.1520 (c) 2.1.
- Complies with Canadian HPFB No Objection (With Limitations)
- Consult the regulations for complete details.

Polyethylene 4016 can be used for a variety of applications such as condiment packaging, dry foods packaging, snack foods packaging, moist foods packaging, sugar pouches, lidding stock and medical packaging.

General

Material Status	• Commercial: Active
Availability	• North America
Agency Ratings	• FDA 21 CFR 177.1520(c) 2.1 • HPFB (Canada) No Objection
Forms	• Pellets
Processing Method	• Extrusion Coating

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.920		ASTM D792
Melt Mass-Flow Rate (190°C/2.16 kg)	16	g/10 min	ASTM D1238

Processing Information

Extrusion	Nominal Value	Unit	Test Method
Melt Temperature	600 to 620	°F	
Maximum Line Speed	> 25.0	ft/sec	Internal Method
Minimum Coating Thickness	0.30	mil	Internal Method
Minimum Coating Weight	4.0	lb/ream	Internal Method
Neck-in (610°F, 1.0 mil)	2.4	in	Internal Method

Extrusion Notes

Fabrication Conditions For Extrusion Coating Film:

- Screw Size: 3.5 in. (89 mm); 30:1 L/D
- Screw Type: Single Flight with Maddock Mixer
- Die Gap: 20 mil (0.508 mm)
- Melt Temperature: 625°F (329°C)
- Output: 250 lb/hr
- Screw Speed: 90 rpm
- Gauge 1.0 mil (25µm)

Notes

¹ Typical properties: these are not to be construed as specifications.