



ELITE™ 5815

Enhanced Polyethylene Resin

Overview

ELITE™ 5815 is produced via INSITE™ Technology from Dow. It is an ethylene alpha-olefin resin for monolayer and coextrusion coating that offers excellent low temperature seal initiation, ultimate seal strength, hot tack strength, and good taste and odor performance.

- Monolayer and coextrusion coating for packaging applications
- Coextruded with acid copolymers as a cost effective foil or PET sealant

Complies with:

- U.S. FDA-DMF
- EU, No 10/2011
- U.S. FDA FCN 424
- Canadian HPFB No Objection

Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.910 g/cm ³	0.910 g/cm ³	ASTM D792
Base Density ¹	0.910 g/cm ³	0.910 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	15 g/10 min	15 g/10 min	ASTM D1238
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Seal Initiation Temperature ² 1.0 mil (25 µm)	195 °F	90.6 °C	Dow Method
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Melting Temperature (DSC)	255 °F	124 °C	Dow Method
Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	550 to 600 °F	288 to 316 °C	
Minimum Coating Thickness	< 0.30 mil	< 7.6 µm	Dow Method
Minimum Coating Weight	< 4.5 lb/ream	< 7.3 g/m ²	Dow Method
Neck-in (600°F (316°C), 1.0 mil (25.4 µm))	9.3 in	235.0 mm	Dow Method

Extrusion Notes

Fabrication Conditions For Cast Film:

- Extruder : Black Clawson
- Screw Size: 3.5 in. (90 mm); 30:1 L/D
- Die Gap: 20 mil (0.508 mm)
- Chill Roll Temperature: 57°F (14°C)
- Melt Temperature: 600°F (315°C)
- Output: 250 lb/hr
- Air Gap: 6 in. (150 mm)

Notes

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

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

² - Coating onto PET/poly/foil/0.5 mil acid copolymer.

- Temperature at which 1 lb/in (4.4 FN/25.4 mm) heat seal strength is achieved.

- Heat Seal Strengths, Topware HT Tester, 0.5 S dwell, 40 psi bar pressure, 10 in./min. pull speed.

