

ELITE™ 5811

Enhanced Polyethylene Resin

Overview

ELITE 5811 is an extrusion coating resin.

Main Characteristics:

- Suitable for processing on conventional hardware
- Extrusion coating resin
- Low neck-in
- Good heat resistance
- Enhanced water vapor barrier
- Extra toughness
- High performance sealant

Complies with:

- EU, No 10/2011
- U.S. FDA 21 CFR 177.1520
- Consult the regulations for complete details.

Additive

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

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.919 g/cm ³	0.919 g/cm ³	ASTM D792
Base Density ¹	0.919 g/cm ³	0.919 g/cm ³	Dow Method
Melt Index (190°C/2.16 kg)	8.0 g/10 min	8.0 g/10 min	ASTM D1238
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Break)	3070 psi	21.2 MPa	ISO 527-2
Tensile Strain (Break)	720 %	720 %	ISO 527-2
Flexural Modulus	44500 psi	307 MPa	ISO 178
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress ²			ISO 527-3
MD : Yield	2800 psi	19.3 MPa	
TD : Yield	2350 psi	16.2 MPa	
Tensile Elongation ²			ISO 527-3
MD : Break	540 %	540 %	
TD : Break	610 %	610 %	
Elmendorf Tear Strength ²			ISO 6383-2
MD	0.54 lbf	2.4 N	
TD	0.86 lbf	3.8 N	
Seal Initiation Temperature ³	208 °F	98.0 °C	Dow Method
Water Vapor Transmission ²	1.2 g/100 in ² /24 hr	18 g/m ² /24 hr	ASTM E96
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Vicat Softening Temperature	216 °F	102 °C	ASTM D1525
Melting Temperature (DSC)	255 °F	124 °C	Dow Method
Extrusion	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Temperature	500 to 608 °F	260 to 320 °C	
Draw Down - From 15g/m ² at 100 m/min ²	820 ft/min	250 m/min	Dow Method
Minimum Coating Weight - Calculated ²	3.7 lb/ream	6.0 g/m ²	Dow Method
Neck-in - 25g/m ² at 100 m/min ² (554°F (290°C))	3.3 in	84.0 mm	Dow Method



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 25g/m² coating onto paper substrate and/or coating web at 250 mm air gap and -15 nip off-set.

³ - 25g/m² coating onto paper substrate and/or coating web at 250 mm air gap and -15 nip off-set.

- Temperatures at which 3 N/15mm heat seal strength is achieved.

- Heat Seal Strengths measured at 0.5sec sealing time, 0.5N/mm² pressure, 5mm seal bar, cross head speed (150 mm/sec).

- Kraft paper substrate

