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/cm³	0.919	g/cm³	ASTM D792
Base Density	0.919	g/cm³	0.919	g/cm³	Dow Method [1]
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					ISO 527-3 [2]
MD : Yield	2800	psi	19.3	MPa	
TD : Yield	2350	psi	16.2	MPa	
Tensile Elongation					ISO 527-3 [2]
MD : Break	540	%	540	%	
TD : Break	610	%	610	%	
Elmendorf Tear Strength					ISO 6383-2 [2]
MD	0.54	lbf	2.4	N	
TD	0.86	lbf	3.8	N	
Seal Initiation Temperature	208	°F	98.0	°C	Dow Method [3]
Water Vapor Transmission	1.2	g/100 in²/24 hr	18	g/m²/24 hr	ASTM E96 [2]
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/m² at 100 m/min	820	ft/min	250	m/min	Dow Method [2]
Minimum Coating Weight - Calculated	3.7	lb/ream	6.0	g/m²	Dow Method [2]
Neck-in - 25g/m² at 100 m/min (554°F (290°C))	3.3	in	84.0	mm	Dow Method [2]

Form No. 400-00150840en
Rev: 2011-11-04

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

Form No. 400-00150840en
Rev: 2011-11-04

Product Stewardship

The Dow Chemical Company and its subsidiaries ("Dow") has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual involved with Dow products ─ from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow will not knowingly sell or sample any product or service ("Product") into any commercial or developmental application that is intended for:

a. long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 72 continuous hours;
b. use in cardiac prosthetic devices regardless of the length of time involved ("cardiac prosthetic devices" include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);
c. use as a critical component in medical devices that support or sustain human life; or
d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. **DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.**

Disclaimer

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dow assumes no obligation or liability for the information in this document. **NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.**

NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; (3) there is greater potential for Dow to change specifications and/or discontinue production; and (4) although Dow may from time to time provide samples of such products, Dow is not obligated to supply or otherwise commercialize such products for any use or application whatsoever.

Additional Information

North America		**Europe/Middle East**	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+31-11567-2626
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
Latin America		**South Africa**	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	**Asia Pacific**	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

www.dowplastics.com

This document is intended for use within Asia Pacific, Europe

Published: 2011-04-05

Form No. 400-00150840en
Rev: 2011-11-04