



## Surlyn® E185SB

DuPont Packaging & Industrial Polymers - Ionomer

Monday, September 21, 2020

### General Information

#### Product Description

DuPont™ Surlyn® E185SB is an ionomer of ethylene acid acrylate terpolymer.

The resin can be processed in conventional blown film, cast film, sheet extrusion and coextrusion equipment designed to process polyethylene and ethylene copolymer type resins.

Surlyn® E185SB can be coextruded with HDPE to provide delamination-type peelable seals. The seal strength can be controlled by processing conditions and/or the thickness of Surlyn® E185SB layer. Thickness is typically in the range of 5 to 15 microns (0.20 to 0.60 mils).

Other benefits of Surlyn® E185SB include:

- Very low seal initiation temperature
- Broad sealing temperature range

#### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Antiblock	• Slip	
Features	• Antiblocking • Food Contact Acceptable	• Low Temperature Heat Sealability • Slip	• Terpolymer
Uses	• Blown Film • Cast Film	• Film • Packaging	• Sealants • Sheet
Agency Ratings	• FDA 21 CFR 175.300	• FDA 21 CFR 175.320	
Processing Method	• Blown Film • Cast Film	• Coextrusion • Sheet Extrusion	

### ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.952		ASTM D792
Density	0.950	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (190°C/2.16 kg)	3.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.0	g/10 min	ISO 1133
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	140	°F	ASTM D1525
Vicat Softening Temperature	140	°F	ISO 306
Peak Melting Temperature	192	°F	ASTM D3417
Melting Temperature (DSC)	192	°F	ISO 3146
Freezing Point			
--	144	°F	ASTM D3417
--	144	°F	ISO 3146

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### Processing Information

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	275	°F
Cylinder Zone 2 Temp.	320	°F
Cylinder Zone 3 Temp.	365	°F
Cylinder Zone 4 Temp.	365	°F
Cylinder Zone 5 Temp.	365	°F
Adapter Temperature	365	°F
Melt Temperature	320 to 455	°F
Die Temperature	365	°F

### Extrusion Notes

The above processing values are for blown film.

Cast film/sheet parameters:

- Feed Zone: 135°C
- Second Zone: 160°C
- Third Zone: 185°C
- Fourth Zone: 210°C
- Fifth Zone: 210°C
- Adapter Zone: 210°C
- Die Zone: 210°C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.