

Dow Surlyn® 1825 Zinc Ionomer

Categories: [Polymer](#); [Film](#); [Thermoplastic](#); [Ionomer](#); [Ionomer, Film Grade](#)

Material Notes: Surlyn® 1825 is available for use in conventional blown, cast film, sheet extrusion and coextrusion equipment designed to process polyethylene and ethylene copolymer type resins.

SURLYN® 1825 complies with Food and Drug Administration Regulation 21 CFR 177.1330(a) - - Ionomeric resins, subject to the limitations and requirements therein. This Regulation describes polymers that may be used in contact with food, subject to the finished food-contact article meeting the extractive limitations under the intended conditions of use, as shown in paragraph (c) of the Regulation.

This former DuPont product line is now a Dow product line.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	0.940 g/cc	0.0340 lb/in ³	ASTM D792, ISO 1183
Melt Flow	1.35 g/10 min @Load 2.16 kg, Temperature 190 °C	1.35 g/10 min @Load 4.76 lb, Temperature 374 °F	ASTM D1238, ISO 1133

Thermal Properties	Metric	English	Comments
Melting Point	76.0 °C	169 °F	Freezing Point; ASTM D3417, ISO 3146
	97.0 °C	207 °F	ASTM D3417, ISO 3146
Vicat Softening Point	73.0 °C	163 °F	ASTM D1525, ISO 306

Processing Properties	Metric	English	Comments
Processing Temperature	<= 285 °C	<= 545 °F	
Feed Temperature	135 °C	275 °F	Blown Film Coextrusion
	160 °C	320 °F	Cast Film/Sheet Processing
Zone 2	160 °C	320 °F	Blown Film Coextrusion
	185 °C	365 °F	Cast Film/Sheet Processing
Zone 3	185 °C	365 °F	Blown Film Coextrusion
	210 °C	410 °F	Cast Film/Sheet Processing
Zone 4	185 °C	365 °F	Blown Film Coextrusion
	210 °C	410 °F	Cast Film/Sheet Processing
Zone 5	185 °C	365 °F	Blown Film Coextrusion
	210 °C	410 °F	Cast Film/Sheet Processing
Adapter Temperature	185 °C	365 °F	Blown Film Coextrusion
	210 °C	410 °F	Cast Film/Sheet Processing
Die Temperature	185 °C	365 °F	Blown Film Coextrusion
	210 °C	410 °F	Cast Film/Sheet Processing
Melt Temperature	160 - 285 °C	320 - 545 °F	Blown/Cast Film Processing

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	See notes for details.

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.