

# Surlyn® 8150

### DuPont Packaging & Industrial Polymers - Ethylene Acrylic Acid Copolymer

Monday, September 21, 2020

#### **General Information**

#### **Product Description**

DuPont™ Surlyn® 8020 is an ionomer of ethylene acid acrylate terpolymer.

This polymeric material can be processed in conventional extrusion and injection equipment designed to process polyethylene and ethylene copolymer type resins, to create various shapes and sheeting.

General			
Material Status	Commercial: Active		
Availability	<ul><li>Africa &amp; Middle East</li><li>Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America
Features	<ul> <li>Food Contact Acceptable</li> </ul>	Sodium Ionomer	
Uses	• Sheet		
Agency Ratings	• FDA 21 CFR 177.1330(a)		
Forms	<ul> <li>Pellets</li> </ul>		
Processing Method	<ul> <li>Extrusion</li> </ul>	<ul> <li>Injection Molding</li> </ul>	Sheet Extrusion

ACTM & ISO Proportioe 1

ASTM & ISO Properties <sup>1</sup>				
Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity	0.972		ASTM D792	
Density	0.970	g/cm³	ISO 1183	
Melt Mass-Flow Rate (190°C/2.16 kg)	4.5	g/10 min	ASTM D1238	
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.5	g/10 min	ISO 1133	
Ion Type	Sodium			
Mechanical	Nominal Value	Unit	Test Method	
Tensile Strength (Break, 73°F)	4500	psi	ASTM D638	
Tensile Stress (Break, 73°F)	4500	psi	ISO 527-2	
Tensile Elongation (Break, 73°F)	320	%	ASTM D638	
Tensile Strain (Break, 73°F)	320	%	ISO 527-2	
Flexural Modulus (73°F)	71100	psi	ASTM D790	
Abrasion Resistance - NBS Index	301		ASTM D1630	
Impact	Nominal Value	Unit	Test Method	
Tensile Impact Strength (73°F)	427	ft-lb/in²	ASTM D1822	
Hardness	Nominal Value	Unit	Test Method	
Durometer Hardness (Shore D)	65		ASTM D2240	
Shore Hardness (Shore D)	65		ISO 868	
Thermal	Nominal Value	Unit	Test Method	
Vicat Softening Temperature	127	°F	ASTM D1525	
Vicat Softening Temperature	127	°F	ISO 306	
Peak Melting Temperature	183	°F	ASTM D3418	
Melting Temperature (DSC)	183	°F	ISO 3146	
Freezing Point				
	104	°F	ASTM D3418	
	104	°F	ISO 3146	



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Optical	Nominal Value	Unit	Test Method	
Haze (250.0 mil)	1.30	%	ASTM D1003	
Additional Information	Nominal Value	Unit		
Maximum Processing Temperature	545	°F		
Processing Information				

Processing Information		
Injection	Nominal Value Unit	
Processing (Melt) Temp	365 to 545 °F	

#### **Notes**

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