# Surlyn<sup>®</sup> 7940 DuPont Packaging & Industrial Polymers - Ethylene Methacrylic Acid

Monday, September 21, 2020

### **General Information**

#### **Product Description**

DuPont<sup>™</sup> Surlyn<sup>®</sup> 7940 is an ionomer of ethylene acid copolymer.

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.

Material Status	<ul> <li>Commercial: Active</li> </ul>		
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	Terpolymer		
Uses	Sheet		
Forms	Pellets		
Processing Method	<ul><li>Blow Molding</li><li>Extrusion</li></ul>	<ul><li>Injection Molding</li><li>Sheet Extrusion</li></ul>	

ASTM & ISO Properties <sup>1</sup>				
Physical	Nominal Value	Unit	Test Method	
Density / Specific Gravity	0.942		ASTM D792	
Density	0.940	g/cm³	ISO 1183	
Melt Mass-Flow Rate (190°C/2.16 kg)	2.6	g/10 min	ASTM D1238	
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.6	g/10 min	ISO 1133	
lon Type	Lithium			
Mechanical	Nominal Value	Unit	Test Method	
Tensile Strength <sup>2</sup> (Yield, 73°F, Compression Molded)	2200	psi	ASTM D638	
Tensile Strength (Break, 73°F)	3800	psi	ASTM D638	
Tensile Stress (Break, 73°F)	3800	psi	ISO 527-2	
Tensile Elongation (Break, 73°F)	290	%	ASTM D638	
Tensile Strain (Break, 73°F)	290	%	ISO 527-2	
Flexural Modulus (73°F)	60900	psi	ASTM D790	
Impact	Nominal Value	Unit	Test Method	
Tensile Impact Strength			ASTM D1822	
-40°F	250	ft·lb/in <sup>2</sup>		
73°F	220	ft-lb/in <sup>2</sup>		
Hardness	Nominal Value	Unit	Test Method	
Durometer Hardness (Shore D)	68		ASTM D2240	
Shore Hardness (Shore D)	68		ISO 868	
Thermal	Nominal Value	Unit	Test Method	
Vicat Softening Temperature	145	°F	ASTM D1525	
Vicat Softening Temperature	145	°F	ISO 306	
Peak Melting Temperature	196	°F	ASTM D3418	
Melting Temperature (DSC)	196	°F	ISO 3146	
Freezing Point				
	118	°F	ASTM D3418	
-	118	°F	ISO 3146	

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## Surlyn® 7940

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Optical	Nominal Value	Unit	Test Method
Haze (250.0 mil)	4.00	%	ASTM D1003
	Processing Information		

Injection
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Nominal Value Unit 365 to 545 °F

#### Notes

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

<sup>2</sup> Type IV, 2.0 in/min

Processing (Melt) Temp



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