



Surlyn® 8920

DuPont Packaging & Industrial Polymers - Ethylene Methacrylic Acid

Monday, September 21, 2020

General Information

Product Description

DuPont™ Surlyn® 8920 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.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Copolymer		
Uses	• Blow Molding Applications	• Sheet	
Forms	• Pellets		
Processing Method	• Blow Molding • Extrusion	• Injection Molding • Sheet Extrusion	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.952		ASTM D792
Density	0.950	g/cm ³	ISO 1183
Melt Mass-Flow Rate (190°C/2.16 kg)	0.90	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.90	g/10 min	ISO 1133
Ion Type	Sodium		
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, 73°F, Compression Molded)	2200	psi	ASTM D638
Tensile Strength (Break, 73°F)	5400	psi	ASTM D638
Tensile Stress (Break, 73°F)	5400	psi	ISO 527-2
Tensile Elongation (Break, 73°F)	350	%	ASTM D638
Tensile Strain (Break, 73°F)	350	%	ISO 527-2
Flexural Modulus			ASTM D790
-4°F	97200	psi	
73°F	55100	psi	
Abrasion Resistance - NBS Index	640		ASTM D1630
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	0.22	ft-lb/in	ASTM D256
Tensile Impact Strength			ASTM D1822
-40°F	164	ft-lb/in ²	
73°F	195	ft-lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	66		ASTM D2240
Shore Hardness (Shore D)	66		ISO 868
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	136	°F	ASTM D1525
Vicat Softening Temperature	136	°F	ISO 306
Peak Melting Temperature	190	°F	ASTM D3418

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Thermal	Nominal Value	Unit	Test Method
Melting Temperature (DSC)	190	°F	ISO 3146
Freezing Point			
--	118	°F	ASTM D3418
--	118	°F	ISO 3146
Optical	Nominal Value	Unit	Test Method
Haze (250.0 mil)	4.00	%	ASTM D1003

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type IV, 2.0 in/min