

Technical Information

IONIA™ 1210

Ionomer

Introduction

IONIA™ 1210 Ionomer is an ethylene acrylic acid based ionomer, designed for blown and cast film for flexible packaging applications. IONIA™ 1210 provides excellent sealability and optimized surface properties in coextrusion film structures.

Ion type:

- Sodium Ionomer

Complies with:

- US FDA 21 CFR
- EU No 10/2011

Typical Properties¹⁾

		Nominal Values		Test Method
Physical	Density	0.940 g/cm ³	0.940 g/cm ³	ASTM D792 ISO 1183
	Melt Index (2.16 kg @190°C)	1.3 g/10min	1.3 g/10min	ASTM D1238 ISO 1133
Thermal	Vicat Softening Point	158 °F	70 °C	ASTM D1525 ISO 306
	Melting Point (DSC)	207 °F	97 °C	SK Method
Optical	Haze	1.2 %	1.2 %	ASTM D1003 ISO 14728
	Gloss(20°)	80	80	ASTM D2457
Films ²⁾	Elmendorf Tear Strength(MD)	21 g	21 g	ASTM D1922
	Elmendorf Tear Strength(TD)	43 g	43 g	ISO 6383-2
	Tensile Strength(Yield, TD)	2060 psi	14.2 MPa	ASTM D882 ISO 527-3
	Tensile Strength(Break, MD)	5280 psi	36.4 MPa	ASTM D882 ISO 527-3
	Tensile Strength(Break, TD)	4786 psi	33.0 MPa	ASTM D882 ISO 527-3
	Tensile Elongation(MD)	207 %	207 %	ASTM D882 ISO 527-3
	Tensile Elongation(TD)	359 %	359 %	ASTM D882 ISO 527-3



Processing Information

Fabrication Conditions for Blown Film:

Equipment used to process this resin should be constructed of corrosion resistant material. Dies and adaptors are recommended to be stainless steels and/or duplex chrome and nickel plated.

Extrusion Notes

- Screw Size: A and B=2.5 in. (64 mm), C=2 in. (51 mm); 30:1 L/D Size
 - Screw Type: A=HS, B=DSBII, C=SFSM
 - Die Gap: 70 mil (1.78 mm)
 - Melt Temperature: A and B=420 °F (216 °C), C=470 °F (243 °C)
 - Output: 10 lb/hr/in. circumference
 - Die Diameter: 8 in.
 - Blow-Up Ratio: 2.5:1
 - Screw Speed: 45 rpm
 - Frost Line Height: 30 in. (762 mm)
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¹⁾ Typical properties: these are not to be construed as specifications

²⁾ Monolayer film data 2.0 mil/50.8 um

