

AMPLIFY™ IO 3801B Functional Polymer

Overview

AMPLIFY™ IO 3801B Ethylene Acrylic Acid Ionomer is designed for blown and cast film coextrusion for flexible packaging applications. It provides excellent sealability in coextrusions with nylon and other film structures with low blocking.

- · For Food and Specialty Applications
- · Excellent sealant for use in blown and cast film coextrusions

Complies with:

U.S. FDA 21 CFR 177.1310(b)
 Consult the regulations for complete details.

Additive

· Antiblock: 2000 ppm

Slip: No

· Processing Aid: No

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.940	g/cm³	0.940	g/cm³	ASTM D792
Melt Index (190°C/2.16 kg)	1.3	g/10 min	1.3	g/10 min	ASTM D1238
Ion Type	Sodium (Na)		Sodium (Na)		
Films	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Film Thickness - Tested	2.0	mil	51	μm	
Tensile Strength					ASTM D882
MD: Yield, 2.0 mil (51 µm)	2200	psi	15.2	MPa	
TD: Yield, 2.0 mil (51 µm)	1820	psi	12.5	MPa	
MD: Break, 2.0 mil (51 μm)	4880	psi	33.6	MPa	
TD: Break, 2.0 mil (51 µm)	4980	psi	34.3	MPa	
Tensile Elongation					ASTM D882
MD: Break, 2.0 mil (51 μm)	280	%	280	%	
TD: Break, 2.0 mil (51 µm)	400	%	400	%	
Thermal	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Melting Temperature (DSC)	203	°F	95.0	°C	Dow Method

Extrusion Notes

Fabrication Conditions For Blown Film:

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

- 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 = DSB II; 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. of die circumference
- Die Diameter: 8 in.Blow-Up Ratio: 2.5:1
- Screw Speed: 45 rpm
- Frost Line Height: 30 in. (762 mm)

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

Form No. 400-00100083en

Rev: 2011-03-22

Monolayer film data without antiblock.

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Published: 2007-03-07

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