



# BIOME BIOPLASTICS

## FILM GRADES – TECHNICAL BROCHURE

### Our Products

	Biome Bioplast 110/01	Biome Bioplast GF106	Biome Bioplast 300	Biome Bioplast 350EL	Biome Bioplast 700	Biome MC52
GM-Free Potato Starch	✓	✓	✓		✓	
Compostability	Industrial	Industrial	Home and Industrial	Home and Industrial	Home	Home
Soft Touch	✓	✓	✓	✓	✓	✓
Key Properties	Excellent mechanical properties even at low gauges					Used as an additive to improve stiffness
Ideal for Producing	Single-use bags, waste bags, bin liners	Sealant for single or multilayer packaging				

### Physical Properties

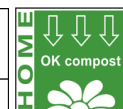
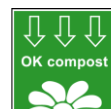
	Biome Bioplast 110/01	Biome Bioplast GF106	Biome Bioplast 300	Biome Bioplast 350EL	Coex 350EL/300V2/3 50EL	Biome Bioplast 700	Biome MC52
MFR at 190 °C (374 °F), 5kg	8.8	4	2 – 3	10 – 11		10 (2.16kg)	10 – 15 (2.16kg)
Density (g/cm <sup>3</sup> )	1.3	1.2 – 1.3	1.32	1.1 – 1.2		1.24	1.25
Coefficient of Friction	*	0.3	V2: 0.3 V3: 0.25	0.5	0.5	0.15	
Optimum Process Melt T (°F)	295 – 300	340 – 350	345 – 355	295 – 300	330 – 340	284 – 302	375 – 392
Melt Density (g/cm <sup>3</sup> )	1.3	1.16	1.18	1.17		1.07	1.09

\* To follow

### Certifications & Biobased Carbon Content

	Biome Bioplast 110/01	Biome Bioplast GF106	Biome Bioplast 300	Biome Bioplast 350EL	Biome Bioplast 700	Biome MC52
Industrial Compost Certified (mil)	7.28	7.28	3.31	3.35		
Home Compost Certified (mil)			3.11	1.1	19.76	0.98
TUV Certificate (Industrial)		TA8011501221				
TUV Certificate (Home)			TA8021903577	TA8022106180	TA8022408196	TA8022408158
BPI Certificate	1754967-13	1754967-2	1754967-10	1754967-12		
Biobased Carbon Content %*	20 – 40	20 – 40	20 – 40	<20	36	>80

\* % based on TUV Austria biobased star system



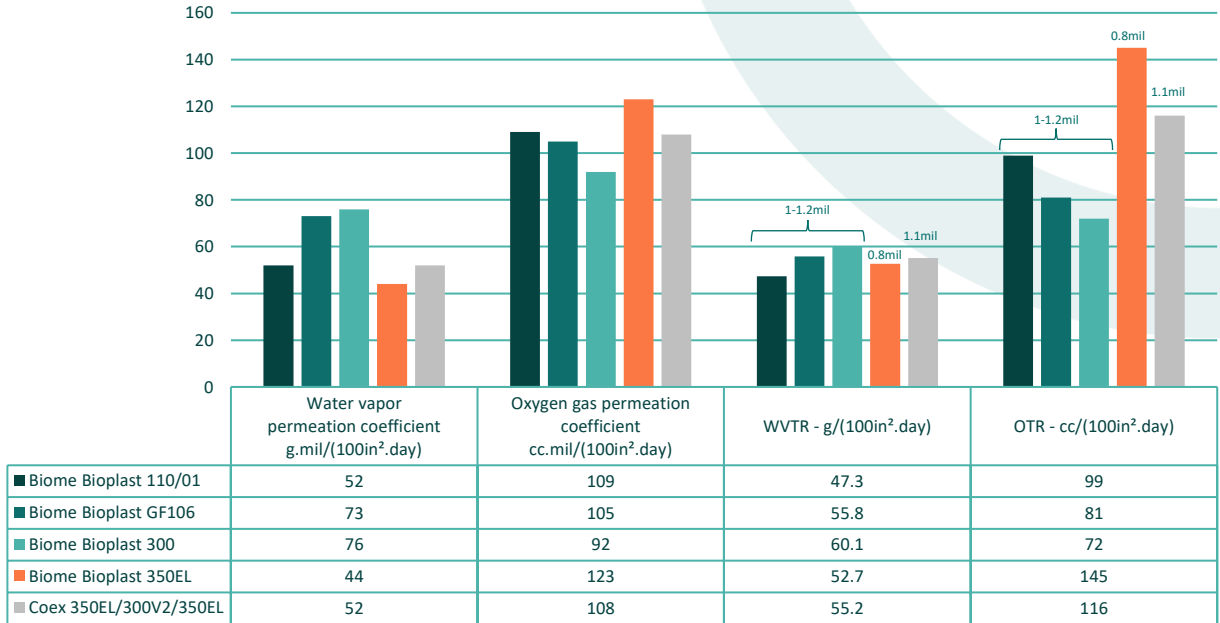
# Properties

## Water Vapor and Oxygen Transmission Rate

Only samples with the same thickness are comparable for the WVTR & OTR.

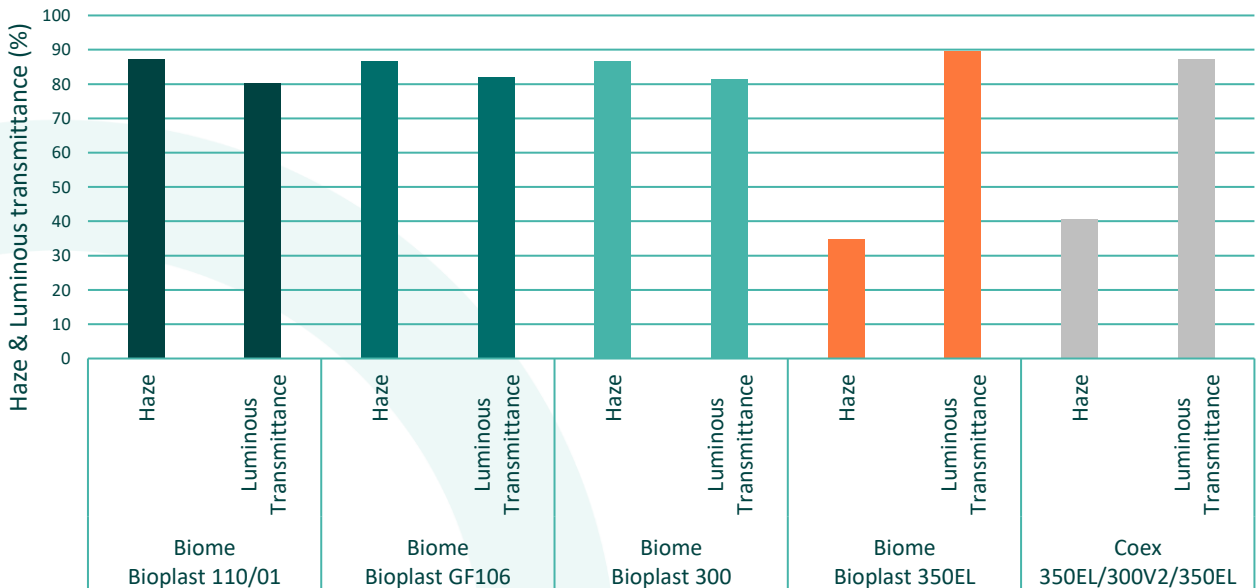
OTR & oxygen gas permeation coefficient in accordance with ASTM F1927-20 at 23°C/50% RH.

WVTR & water vapor permeation coefficient in accordance with ASTM F1249-20 at 38°C/90% RH.



## Haze & Luminous Transmittance

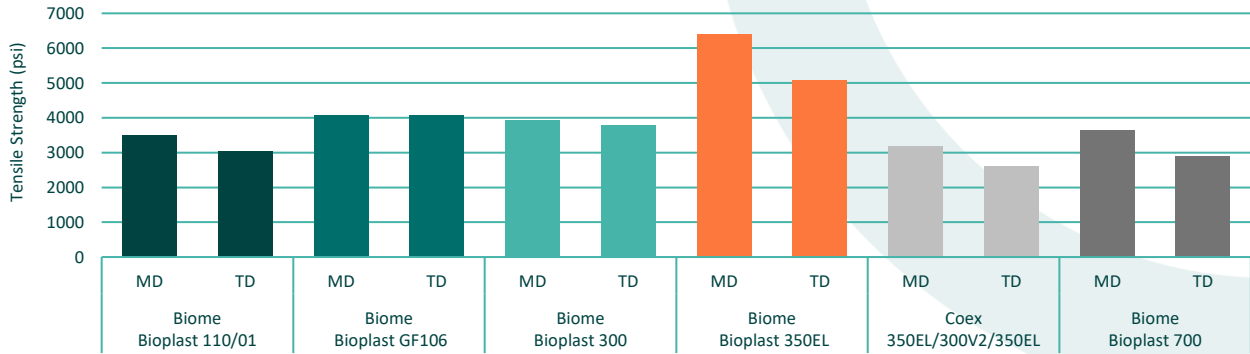
In accordance with ASTM D1003-13



# Mechanical Properties

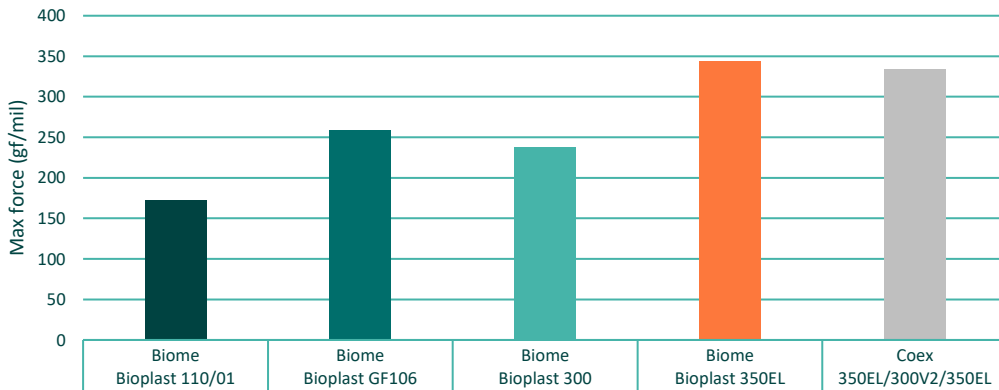
## Tensile Strength

In accordance with ISO 527-3



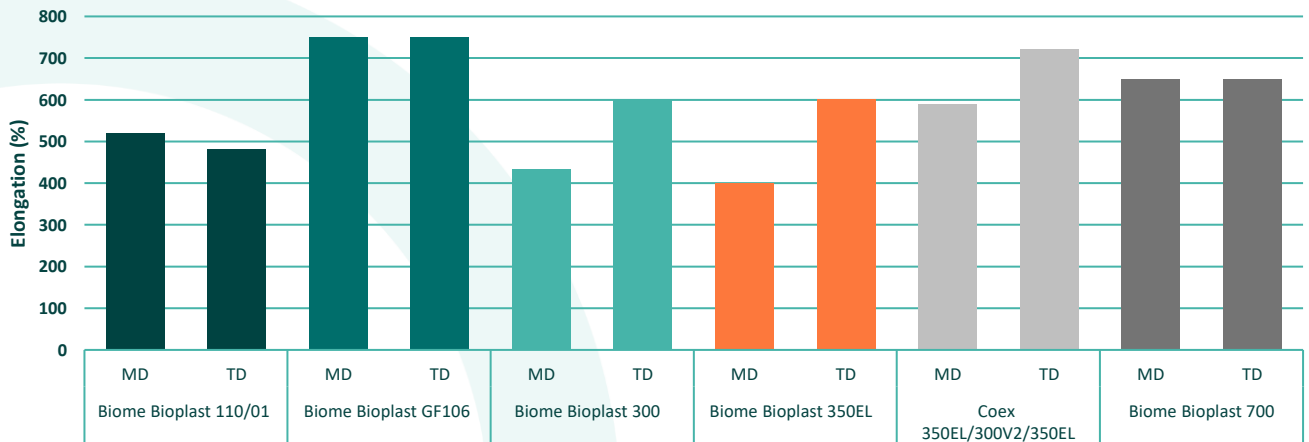
## Penetration-Puncture Resistance (Normalized)

In accordance with ASTM F1306-16



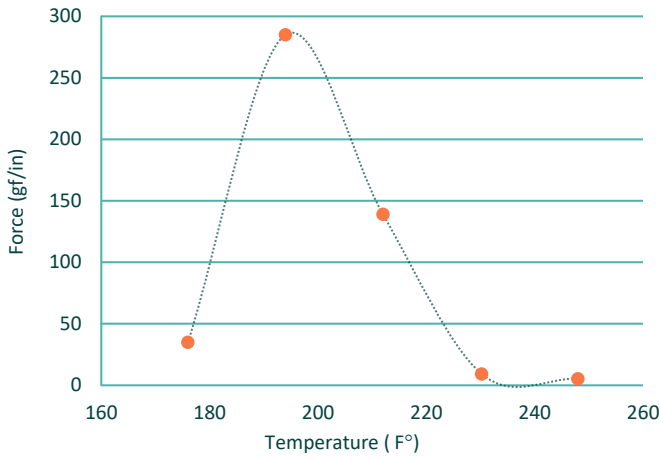
## Elongation at Break

In accordance with ISO 527-3

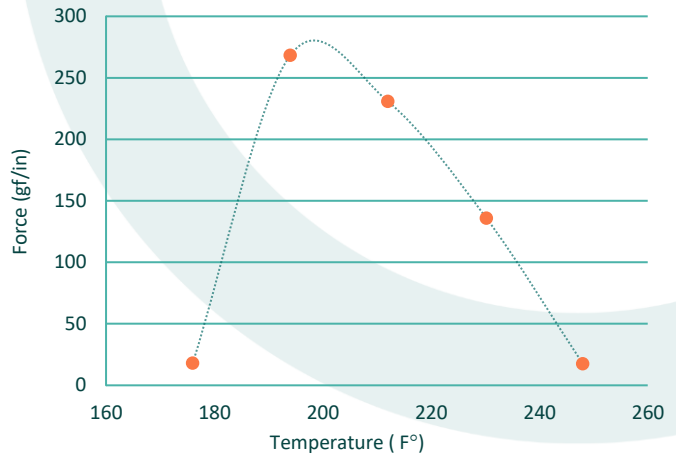


# Heat Seal Curves

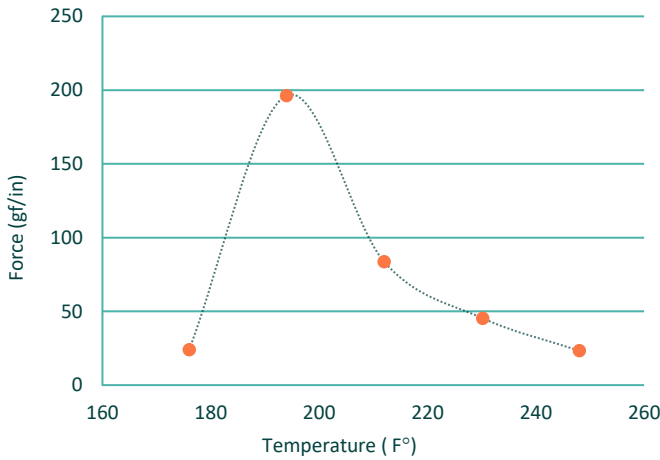
### Biome Bioplast 110/01



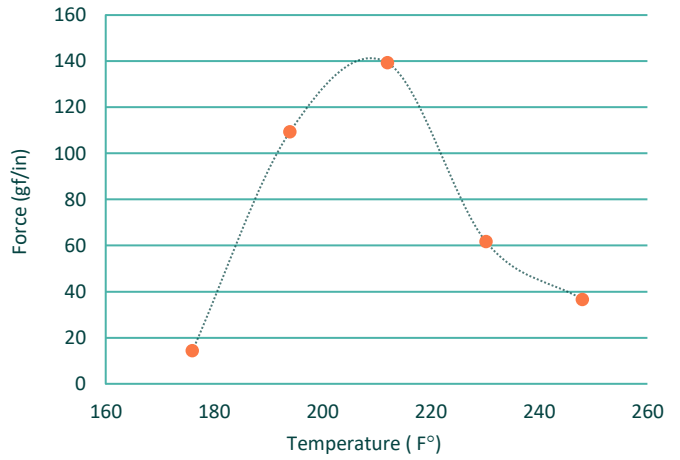
### Biome Bioplast GF106



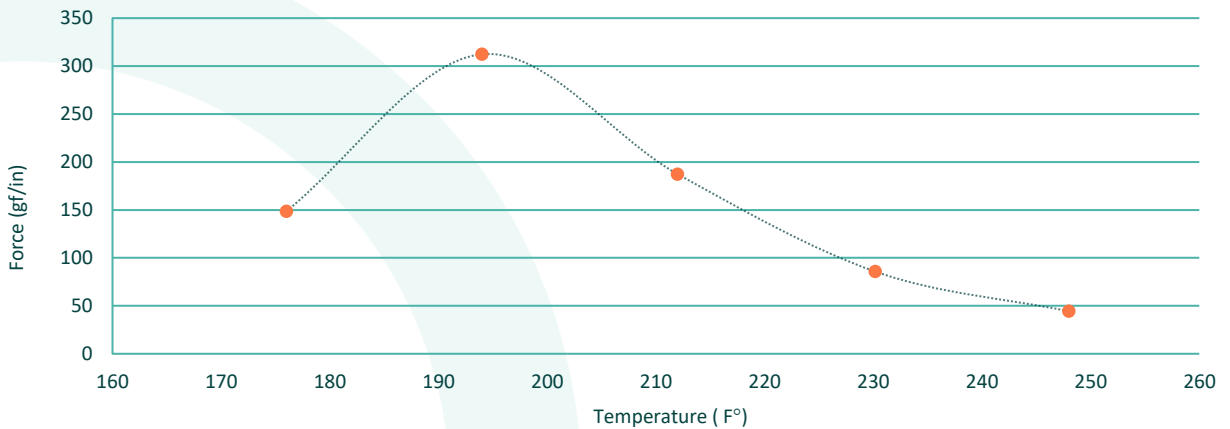
### Biome Bioplast 300



### Biome Bioplast 350EL



### Coex 350EL/300V2/350EL





## Talk to our experts

Do you have questions about the technical properties and/or processibility of our film grades?

Our team will walk you through our solutions and guide you on how you can easily switch to sustainable and compostable packaging.

## Get a sense of our film properties

Judge for yourself and request your free film samples today.

### Alexandra Busnel, PhD

VP Business Development, North America

T (825) 733 2135

E [alexandra.busnel@biomebioplastics.com](mailto:alexandra.busnel@biomebioplastics.com)

### Thomas Barlow

Technical & Operations Manager, North America

T (368) 887 6084

E [thomas.barlow@biomebioplastics.com](mailto:thomas.barlow@biomebioplastics.com)