



## Biaxially Oriented PA-film

### Technical Data Sheet

#### BIAXIS BOPA 12 STD/HS (High Shrinkage)

##### General Properties

	Unit	Value	Standard / Test method
Thickness	µm	12 +/-10%	DIN 53370
Melting Point	°C	220 +/- 2	ISO 3146-C / DSC
Density	g/cm <sup>3</sup>	1,15 +/- 0,01	ISO 1183
Haze	%	>92	ASTM D 1003
Shrinkage	% (MD / TD), 160°C, 5 min	>15 / >15	DIN EN ISO 11501
Friction (non-treated)	Stat. / dyn.; Film / Alu	< 0,40 / < 0,40	DIN EN ISO 8295, ASTM D 1894
Treatment level	dynes/cm (treated / not treated)	> 45 / > 37	DIN ISO 8296, ASTM D 2578

##### Mechanical Properties

	Unit	Value	Standard / Test method
Tensile Strength	N/mm <sup>2</sup> (MD / TD)	>220 / >220	DIN EN ISO 527, ASTM D 882
Elongation at Break	% (MD / TD)	100 / 80 +/- 30	DIN EN ISO 527, ASTM D 882
Puncture Resistance	N	>9	DIN EN 14477
Flex-Crack	holes / dm <sup>2</sup>	<5	ASTM F 392-74

All mechanical values are according to 2 sigma level

##### Barrier Properties

	Unit	Value	Standard / Test method
O <sub>2</sub> Transmission Rate	cm <sup>3</sup> / m <sup>2</sup> , 24h, bar	40 *)	DIN 53380-3, ASTM D 3985 23°C, 0% RH
		205 *)	DIN 53380-3, ASTM D 3985 23°C, 50% RH
WV Transmission Rate	g/m <sup>2</sup> , 24h	- *)	DIN 53122, ASTM E 96 23°C, 85% RH

\*) Typical value

All the rawmaterials used in Biais films fulfill the requirements for food packaging as specified by the latest EU- and FDA-regulations.

The recommendations and data given are based on our experience to date, but no liability can be assumed in connection with their usage.

Values are valid on print date 3.12.2021

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