

## Biond Bio-Print Film P GB BF 90

Biond product that offers a biobased film, free from plasticizers, with a 90-micron thickness, a permanent greyback adhesive and a bubble-free liner of 135 g/m<sup>2</sup>, that ensures high stability during printing. Recommended for a wide range of short- and medium-term promotional applications.

### Face Film

Bio-based Film with > 80% bio-components

Finish	White Glossy		White Matte	
	Value	Tolerance	Standard	
Thickness (µm)	90	± 5%	Digidelta Test Method	
Grammage (g/m <sup>2</sup> )	100	± 10%	Digidelta Test Method	
Gloss (60°C) (%)	≥ 75	± 10 %	Digidelta Test Method	
Bio-based content (%)	85		EN 16640:2017/ASTM D6866	
Tensile strenght (MPa)	> 30		ASTM D412	
Elongation (%)	> 250		ASTM D412	
Modulus (MPa)	24		ASTM D412	
Flammability (FR)	A2-s1, d0		ISO 13501-1/ISO 11925-2	
Expected durability	Up to 3 years outdoor and 5 years with Biond overlamination/ Up to 10 years indoor			

### Adhesive

Clear acrylic based, permanent greyback bubble free adhesive

	Value	Standard
Peel Adhesion 20 min steel (N/25mm)	> 9	FINAT FTMI
Peel Adhesion 24 h steel (N/25mm)	> 17	FINAT FTMI
Shrinkage (mm)	Max. 0,1	FINAT FTMI4
Application Temperature (°C)	> 10 °C	
Service Temperature (°C)	-10 a 90 °C	

### Liner

Coated double PE embossed paper

	Value	Tolerance	Standard
Thickness (µm)	148	± 5 µm	Digidelta Test Method
Grammage (g/m <sup>2</sup> )	135	± 5 %	Digidelta Test Method

## Biond Bio-Print Film P GB BF 90

### Durability

• Indoor: up to 10 years (unprocessed and without sun exposure). • Outdoor: up to 3 years/5 years with Biond overlamination (unprocessed and applied under vertical exposure normal Central European climate). • Storage: 24 months, applicable only to unprocessed material under the following STORAGE CONDITIONS: • Store at a temperature of 20°C ± 5°C and 50 ± 5% relative humidity, avoiding major climatic variations. • The storage area must be dry and clean. • Keep the material in its original packaging when not in use to protect it from dust and contamination. • Do not expose to direct sunlight or heat sources. • The product should be stored vertically to ensure its quality is not compromised.

### Printing Methods

• Specially developed for Solvent, Latex, UV and UV gel printing. • To ensure the best possible print quality, please check that the correct printing profiles are being used. • Excessive ink application on the product may cause changes in its characteristics, improper drying, delamination, and/or poor product performance. Inadequate drying may result in curling, wrinkling, and adhesion failures, affecting the material's performance. • A minimum drying time of 48 hours is recommended before any additional processing. Drying should be carried out with the product unrolled. • It is recommended that this product be protected with the recommended lamination to provide the necessary resistance.

### Applications

• Application surface: flat and slightly curved. • Applications: Indoor and outdoor advertising of short and medium duration. • Substrate not recommended for areas with car traffic; flexible or low energy substrates; non-flat surfaces; painted or unpainted cardboard walls; plaster walls; wallpaper; unclean or rough surfaces; surfaces with degraded paint. • Do not expose to combustible vapors or spills. • Surfaces to which the material will be applied must be thoroughly cleaned and free of dust or any other contamination that could affect the material's adhesion. • Non-vertical application implies a significant reduction in durability, as do climate and sun exposure angles. • Before using the film, we recommend that it remains at the workplace temperature for at least 24 hours. • Application to damp surfaces or wet application may result in adhesive residue being left on the surface after removal. As no two surfaces are the same, it is recommended that tests are carried out before use to check the removability. • There may be other factors not described which could influence performance in use.

### Important Remarks

• BIOND is not responsible for the ease or speed of removal of the applied material. Suitable air and substrate temperatures must be taken into account. • The user must determine the compatibility of the material with the specific application before use. • The data contained in this information is based on our knowledge and practical experience. It is intended as a source of information and does not constitute a guarantee. Subject to change without notice. • When carrying out a job, we recommend using the same batch of product. • The user must determine the compatibility of the material with the specific application intended before use. • BIOND accepts no liability for misuse or improper storage and can never be held responsible for loss or damage to third parties.

## Biond Bio-Print Film R Dot Matrix 90

Biond product that offers a biobased film, free from plasticizers, with a 90-micron thickness, a removable dot matrix adhesive for easy application and repositioning on smooth surfaces, and a double side PE liner of 135g/m<sup>2</sup> that provides stability during printing. Recommended for a wide range of short term promotional applications.

### Face Film

Bio-based Film with > 80% bio-components

Finish	White Matte		
	Value	Tolerance	Standard
Thickness (µm)	90	± 5%	Digidelta Test Method
Grammage (g/m <sup>2</sup> )	100	± 10%	Digidelta Test Method
Gloss (60°C) (%)	≤ 15	± 10 %	Digidelta Test Method
Bio-based content (%)	85		EN 16640:2017/ASTM D6866
Tensile strenght ( MPa)	> 30		ASTM D412
Elongation (%)	> 250		ASTM D412
Modulus (MPa)	24		ASTM D412
Flammability (FR)	A2-S1, d0		ISO 13501-1/ISO 11925-2

### Adhesive

Clear acrylic based removable adhesive, smooth and easy to apply

	Value	Standard
Peel Adhesion 20 min steel (N/25mm)	> 2	FINAT FTMI
Peel Adhesion 24 h steel (N/25mm)	> 4	FINAT FTMI
Shrinkage (mm)	Max. 0,1	FINAT FTMI4
Application Temperature (°C)	> 10 °C	
Service Temperature (°C)	-10 a 90 °C	

### Liner

PE double side coated

	Value	Tolerance	Standard
Thickness (µm)	148	± 5 µm	Digidelta Test Method
Grammage (g/m <sup>2</sup> )	135	± 5 %	Digidelta Test Method

## Biond Bio-Print Film R Dot Matrix 90

### Durability

- INDOOR: up to 1 year (unprocessed and not exposed to sunlight).
- Storage: 24 months, applicable only to unprocessed material under the following STORAGE CONDITIONS:
- Store at a temperature of 20°C ± 5°C and 50 ± 5% relative humidity, avoiding major climatic variations.
- The storage area must be dry and clean.
- Keep the material in its original packaging when not in use to protect it from dust and contamination.
- Do not expose to direct sunlight or heat sources.
- The product should be stored vertically to ensure its quality is not compromised.

### Printing Methods

- Specially developed for Solvent, Latex, UV and UV gel printing.
  - To ensure the best possible print quality, please check that the correct printing profiles are being used.
  - Excessive ink application on the product may cause changes in its characteristics, improper drying, delamination, and/or poor product performance.
- Inadequate drying may result in curling, wrinkling, and adhesion failures, affecting the material's performance.
- A minimum drying time of 48 hours is recommended before any additional processing. Drying should be carried out with the product unrolled.

### Applications

- Application surface: glass, flat and smooth surfaces.
- Substrate not recommended for areas with car traffic; flexible or low energy substrates; non-flat surfaces; painted or unpainted cardboard walls; plaster walls; wallpaper; unclean or rough surfaces; surfaces with degraded paint.
- Application with water is not recommended.
- Do not expose to combustible vapors or spills.
- Surfaces to which the material will be applied must be thoroughly cleaned and free of dust or any other contamination that could affect the material's adhesion.
- Non-vertical application implies a significant reduction in durability, as do climate and sun exposure angles.
- Before using the film, we recommend that it remains at the workplace temperature for at least 24 hours.
- Application to damp surfaces or wet application may result in adhesive residue being left on the surface after removal. As no two surfaces are the same, it is recommended that tests are carried out before use to check the removability.
- There may be other factors not described which could influence performance in use.

### Important Remarks

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Datasheet Revision Date: 29/07/25

Signatures: SC

## Biond Bio-Protection Film P HT 70

Overlamination from the Biond range that offers a 70 micron biobased film, a high performance high tack permanent ultracrystalline clear UV acrylic adhesive and a glassine liner.

### Face Film

Bio-based Film with > 80% bio-components

Finish	Clear Glossy		Clear Matte		Standard
	Valor	Tolerance	Valor	Tolerance	
<b>Thickness (µm)</b>	70	± 5%	70	± 5%	Digidelta Test Method
<b>Grammage (g/m2)</b>	75	± 10%	75	± 10%	Digidelta Test Method
<b>Gloss (60°C) (%) Bio-based content (%)</b>	≥ 90	± 10 %	≤ 10	± 10 %	Digidelta Test Method
<b>Tensile strenght (MPa)</b>	97		94		EN 16640:2017/ASTM D6866
<b>Elongation (%)</b>	> 30		> 30		ASTM D412
<b>Modulus (MPa)</b>	> 250		> 250		ASTM D412
<b>Flammability (FR)</b>	24		24		ASTM D412
<b>Expected durability</b>	A2-S1, d0		A2-S1, d0		ISO 13501-1/ISO 11925-2
	Up to 5 years outdoor/ 10 years indoor		Up to 5 years outdoor/ 10 years indoor		

### Adhesive

Clear UV acrylic based, permanent high tack adhesive

	Value	Standard
<b>Peel Adhesion 20 min steel (N/25mm)</b>	> 14	FINAT FTM1
<b>Peel Adhesion 24 h steel (N/25mm)</b>	> 18	FINAT FTM1
<b>Shrinkage (mm)</b>	Max. 0,1	FINAT FTM14
<b>Application Temperature (°C)</b>	> 10 °C	
<b>Service Temperature (°C)</b>	-10 a 90 °C	

### Liner

Glassine Paper

	Value	Tolerance	Standard
<b>Thickness (µm)</b>	55	± 10 µm	ISO 534
<b>Grammage (g/m2)</b>	62	± 5%	ISO 536

## Biond Bio-Protection Film P HT 70

### Durability

• Indoor: Up to 10 years (unprocessed and without sun exposure) • Outdoor: Up to 5 years (unprocessed and when applied on vertical exposure - Central European climate). • Storage: 24 months, applicable only to unprocessed material under the following STORAGE CONDITIONS: • Store at a temperature of 20°C ± 5°C and 50 ± 5% relative humidity, avoiding major climatic variations. • The storage area must be dry and clean. • Keep the material in its original packaging when not in use to protect it from dust and contamination. • Do not expose to direct sunlight or heat sources. • The product should be stored vertically to ensure its quality is not compromised.

### Applications

- Application surface: flat and slightly curved.
- Not recommended for areas with car traffic; flexible or low-energy substrates; non-flat surfaces; painted or unpainted walls; plaster walls; wallpaper; uncleaned or rough surfaces; surfaces with degraded paint.
- Do not expose to combustible vapors or spills.
- Surfaces to which the material will be applied must be thoroughly cleaned and free of dust or any other contamination that could affect the material's adhesion.
- Non-vertical application implies a significant reduction in durability, as do climate and sun exposure angles.
- Before using the film, we recommend that it remains at the workplace temperature for at least 24 hours.
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## Biond Bio-Protection Film P HT 70

Overlamination from the Biond range that offers a 70 micron biobased film, a high performance high tack permanent ultracrystalline clear UV acrylic adhesive and a glassine liner.

### Face Film

Bio-based Film with > 80% bio-components

Finish	Clear Glossy		Clear Matte		Standard
	Valor	Tolerance	Valor	Tolerance	
<b>Thickness (µm)</b>	70	± 5%	70	± 5%	Digidelta Test Method
<b>Grammage (g/m2)</b>	75	± 10%	75	± 10%	Digidelta Test Method
<b>Gloss (60°C) (%) Bio-based content (%)</b>	≥ 90	± 10 %	≤ 10	± 10 %	Digidelta Test Method
<b>Tensile strenght (MPa)</b>	97		94		EN 16640:2017/ASTM D6866
<b>Elongation (%)</b>	> 30		> 30		ASTM D412
<b>Modulus (MPa)</b>	> 250		> 250		ASTM D412
<b>Flammability (FR)</b>	24		24		ASTM D412
<b>Expected durability</b>	A2-S1, d0		A2-S1, d0		ISO 13501-1/ISO 11925-2
	Up to 5 years outdoor/ 10 years indoor		Up to 5 years outdoor/ 10 years indoor		

### Adhesive

Clear UV acrylic based, permanent high tack adhesive

	Value	Standard
<b>Peel Adhesion 20 min steel (N/25mm)</b>	> 14	FINAT FTM1
<b>Peel Adhesion 24 h steel (N/25mm)</b>	> 18	FINAT FTM1
<b>Shrinkage (mm)</b>	Max. 0,1	FINAT FTM14
<b>Application Temperature (°C)</b>	> 10 °C	
<b>Service Temperature (°C)</b>	-10 a 90 °C	

### Liner

Glassine Paper

	Value	Tolerance	Standard
<b>Thickness (µm)</b>	55	± 10 µm	ISO 534
<b>Grammage (g/m2)</b>	62	± 5%	ISO 536

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