For sustainable daily life





Who would brand trash bags?

There were few players in the market for biodegradable bags when this company from Ylöjärvi stepped onto the scene in 1997. At that time, Bioska was the only more durable alternative to paper bags, which easily get damp.

THE FIRST BIOSKA PRODUCTS were bags and inliners. They were made to meet biowaste treatment needs of all sizes: households, restaurants and waste management companies could now obtain liners for both their indoor and outdoor containers.

AS RAW MATERIALS IMPROVED, the composting time of bags and inliners decreased. Bioska's durability and moisture retention just kept getting better and better. A version with greater tensile strength was developed for use as a shopping bag. Today, Bioska acquires its raw materials from all the major suppliers. We have recipes for both single- and multilayer films.

AND OUR PRODUCT RANGE IS NO LONGER LIMITED TO JUST BAGS.

Multilayer films are used to meet a wide range of packaging and protection requirements in industry and agriculture. We have films that are coloured and transparent, symmetrical and asymmetrical. A film's exact properties will depend on what our customer needs to use it for.

ALL BIOSKA PRODUCTS SHARE ONE THING IN COMMON:

they're still made in Finland. Our production is CO₂-neutral, as our plant is powered by wind energy and harnesses waste heat in its processes. All Bioska products are manufactured in accordance with the European standard for industrial compostability, EN 13432. This means that they're 100% compostable and biodegradable. Some also decompose during home composting, at significantly lower temperatures than in industrial processes.











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Bioska bags, sacks and inliners

Bioska products are 100% compostable and biodegradable. They're suitable for all types of biowaste sorting.

- easy and convenient to use in both kitchens and waste rooms
- breathable material prevents condensation
- food sample bags can even withstand temporary freezing
- a hygienic way to handle evening walks with your dog



Technical information

Star bottom, double seams, straight bottom, gussets... We make exactly the kind of bags, sacks and inliners that our customers need. Our standard print is a one colour continuous print on one side of the bag, and the standard colour of our bags is light green. Other colours and prints are possible. All inks are EN:13432 certified. Our bags are made from the industrially compostable Bioska 302 material and the home compostable Bioska 402 material.

PRODUCT	VOLUME	STRENGTH (mm)	WIDTH (mm)	LENGTH (mm)	COLOUR
BIOWASTE BAGS	6L-60L	0.012-0.050	200-600	250-700	Standard
HAUSKA/OTHER DOG POOP BAGS	2L >	0.012-0.030	200-500	250-500	Green or black
BIO SACKS / INLINERS	75L-240L	0.014-0.050	750 - 1150	900–1500	Standard
BIO INLINERS FOR DEEP CONTAINERS	800L-1300L	0.020 - 0.050	700–1200	900-3350	Standard
FOOD SAMPLE BAGS	2L >	0.012-0.030	200-500	250-500	Translucent milky white



Bioska Plus bags, sacks and inliners

The most pleasant biowaste recycling experience in the market

Bioska Plus takes biowaste sorting to a whole new level. Its performance in industrial composting is in a class of its own.

- can withstand a greater weight of biowaste than any other biobag on the market
- keeps your kitchen bin clean and dry
- tears more easily in waste treatment facilities
- composts at lower temperatures.



Technical information

Bioska Plus products have been designed to meet the requirements of waste treatment facilities. They've been tested by a variety of different biowaste treatment facilities with excellent results. They were also proven highly suitable for use in biogas processes. These products come in brown and olive green, and are made from the industrially compostable Bioska Plus material.

PRODUCT	VOLUME	STRENGTH (mm)	WIDTH (mm)	LENGTH (mm)	COLOUR
BIOWASTE BAGS	6L-60L	0.014 - 0.050	200-600	250-700	Brown
BIO SACKS / INLINERS	75 L – 240 L	0.014 - 0.050	750 - 1150	900–1500	Brown
HOME COMPOST BAG	20L	0.018	420	500	Brown
DRY TOILET INLINER	60L	0.022	600	700	Olive green









Bioska shopping bags

Shopping bags

Bioska shopping bags are an eco-friendly alternative to traditional plastic bags. The material is extremely durable and has the same tensile strength as a regular shopping bag. Thanks to its multilayer film, Bioska's shopping bags have a longer shelf life than other biodegradable shopping bags. We've been making these 100% compostable shopping bags since 2007.



Fruit-and-vegetable bags

Bioska fruit-and-vegetable bags are an ecological and sustainable alternative to traditional plastic bags. They're made from breathable material to prevent moisture from accumulating inside the bag during storage. The bags can withstand several kilos of weight and can be reused as biowaste bags. Bioska has been making these handy fruit-and-vegetable bags since 2000.

Multipurpose bags

These multipurpose compostable bags are sold in handy rolls. They have a capacity of 30L.



Technical information

Our range of shopping bags includes t-shirt bags, patch handle bags, smaller pharmacy bags, and multipurpose bags. They're all handy and sustainable alternatives to plastic bags. They can also be reused for biowaste sorting, in the kitchen or garden. These bags are made from the industrially compostable Bioska 302 material.

PRODUCT	STRENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	OTHER INFORMA- TION	PACKAGING METHOD	PRINTING
SHOPPING BAG (t-shirt)	0.020-0.050	370 - 570	460 - 650	Gussets min 65mm max 120mm	Roll, block, and loose packed in a box	Continuous 1+0 Position 4+4
SHOPPING BAG (patch handle)	0.030 - 0.060	300-630	400-600	40 – 60 mm bottom pleat	Loose packed in a box	Position 8+8
PHARMACY BAG	0.025 - 0.045	200-400	270-600	30 mm hanging block	Block and loose packed in a box	Position 4+4
MULTIPURPOSE BAG	0.020-0.060	370-600	460 - 650	_	Roll (with or without core)	Continuous 1+0
FRUIT-AND- VEGETABLE BAG	0.012 - 0.035	300-450	400 - 550	-	Roll (with or without core)	Continuous 1+0



Walki®Bioska Film 302/402

Our 100% compostable agricultural, laminating and magazine packaging films reduce the amount of work needed at the waste processing stage.

Agricultural film

- its compostability reduces labour costs in fields and greenhouses
- easy to handle in agricultural processes
- increases plant productivity by raising the temperature of the soil and preventing moisture evaporation
- reduces the need for pesticides

Laminating film

- a compostable film for compostable products requiring lamination
- easy to handle in industrial processes
- an odourless and breathable alternative for items such as diapers, sanitary towels, food pads and tablecloths
- its tensile strength and rigidity are in a class of their own
- can be laminated with hotmelt or with heat and pressure

Magazine packaging film

- durable packaging film that protects products during distribution
- easy to handle in industrial processes
- easy to seal
- works well in a variety of different packaging machines
- magazines remain visible through the milky white film







Technical information

Agricultural films come in black or black-and-white. Laminating films and magazine packaging films are milky white. They're all easy to print on. The films are made from the industrially compostable Bioska 302 material and home compostable Bioska 402 material.

	STANDARD		NOMINAL VALUE	UNIT	TOLERANCE
DIMENSIONS					
THICKNESS	ISO 534		20	mic	+/- 10%
PHYSICO-MECHANICAL P	ROPERTIES				
UNIT WEIGHT	ASTM D 2673		25	g/m²	-
DENSITY	ISO 1133		1.25	g/cm³	-
MODULUS (AUTOMATIC YOUNG'S)	ISO 527-3	MD	6,102	MPa	-
		CD	29,458	MPa	-
TENSILE STRESS AT YIELD	ISO 527-3	MD	47.9	MPa	-
		CD	21.3	MPa	-
TENSILE STRAIN AT TENSILE STRENGTH	ISO 527-3	MD	47.4	MPa	-
		CD	26.56	MPa	-
TENSILE STRAIN AT TENSILE STRENGTH	ISO 527-3	MD	2.23	mm/mm	-
		CD	4.7	mm/mm	-
TENSILE EXTENSION AT BREAK	ISO 527-3	MD	119.6	mm/mm	-
		CD	247.6	mm/mm	-
LOAD AT TENSILE STRENGTH	ISO 6383-1	MD	0.42	Ν	-
		CD	2.73	Ν	-
TEAR RESISTANCE	ISO 6383-1	MD	28.28	N/mm	-
		CD	181.79	N/mm	-
TENSILE STRESS AT TENSILE STRENGTH	ISO 6383-1	MD	1.13	MPa	-
		CD	7.27	MPa	-
THERMAL PROPERTIES					
MELTING POINT	ISO 3146		125	°C	-



Walki®Bioska Film 501

Walki®Bioska Film 501 transparent packaging film is ideal whenever you need to put your product on display. It's great for packaging products such as magazines, napkins and toilet rolls. It can even be used as shrink wrap.

- home compostable and therefore suitable for all markets
- independent studies have shown that this film biodegrades even in marine conditions
- has been observed to compost in a matter of weeks at waste treatment facilities, even during the winter
- has a pleasant feel and is easy to print on



Technical information

Walki®Bioska Film 501 has a pleasant feel and is easy to print on. Its breathable structure prevents condensation forming. This film is also available for food packaging.

	STANDARD		NOMINAL VALUE	UNIT	TOLERANCE
DIMENSIONS					
THICKNESS	ISO 534		25	mic	+/- 10%
PHYSICO-MECHANICAL P	ROPERTIES				
UNIT WEIGHT	ASTM D 2673		31.25	g/m²	-
DENSITY	ISO 1133		1.25	g/cm³	-
MODULUS (AUTOMATIC YOUNG'S)	ISO 527-3	MD	1,618	MPa	_
		CD	8,474	MPa	-
TENSILE STRESS AT YIELD	ISO 527-3	MD	75.6	MPa	-
		CD	36.4	MPa	_

	STANDARD		NOMINAL VALUE	UNIT	TOLERANCE
TENSILE STRESS AT TENSILE STRENGTH	ISO 527-3	MD	80.4	MPa	-
		CD	38.2	MPa	-
TENSILE STRAIN AT TENSILE STRENGTH	ISO 527-3	MD	4.93	mm/mm	-
		CD	2.11	mm/mm	-
TENSILE STRAIN AT BREAK	ISO 527-3	MD	5.11	mm/mm	_
		CD	3.75	mm/mm	-
TENSILE EXTENSION AT BREAK	ISO 527-3	MD	255.7	mm	-
		CD	186.9	mm	-
LOAD AT TENSILE STRENGTH	ISO 6383-1	MD	7.3	N	_
		CD	9.34	Ν	-
TEAR RESISTANCE	ISO 6383-1	MD	487	N/mm	_
		CD	623	N/mm	-
TENSILE STRESS AT TENSILE STRENGTH	ISO 6383-1	MD	19.5	MPa	_
		CD	24.9	MPa	-
BARRIER PROPERTIES					
WVTR	ASTM E 96		156	g/m²/24h	-
OTR	ASTM D 3985-5		1,830	cm ³ /m ² /24h	-
THERMAL PROPERTIES					
MELTING POINT	ISO 3146		125	°C	-





Walki®Bioska Film 506

Walki®Bioska Film 506 is particularly suited to packaging fruit, vegetables and berries. The shelf life of fresh produce can be extended. This film retains its durability even under demanding conditions, such as oils and salad dressings. The products can still be easily seen through the film. You could just as well use this film to package clothes, or even to make bags, sacks and inliners.

- meets the EN 13432 industrial compostability standard
- easy to use, seal and print on with flow-pack machines
- its asymmetric structure keeps sealing blades clean
- can even be sealed with ultrasonic or hot-air



Technical information

Walki®Bioska Film 506 is industrially compostable. It becomes self-adhesive when subjected to heat, so a separate adhesive is not necessarily required during lamination. It can be laminated onto cardboard, cellulose-based products and a variety of other compostable materials.

	STANDARD		NOMINAL VALUE	UNIT	TOLERANCE
DIMENSIONS					
THICKNESS	ISO 534		25	mic	+/- 10%
PHYSICO-MECHANICAL P	ROPERTIES				
UNIT WEIGHT	ASTM D 2673		31.25	g/m²	-
DENSITY	ISO 1133		1.25	g/cm³	-
MODULUS (AUTOMATIC YOUNG'S)	ISO 527-3	MD	4,662	MPa	-
		CD	4,081	MPa	-
TENSILE STRESS AT YIELD	ISO 527-3	MD	57.3	MPa	_
		CD	54.0	MPa	-

	STANDARD		NOMINAL VALUE	UNIT	TOLERANCE
TENSILE STRESS AT TENSILE STRENGTH	ISO 527-3	MD	83.1	MPa	-
		CD	53.5	MPa	-
TENSILE STRAIN AT TENSILE STRENGTH	ISO 527-3	MD	2.64	mm/mm	-
		CD	0.08	mm/mm	-
TENSILE STRAIN AT BREAK	ISO 527-3	MD	2.92	mm/mm	-
		CD	1	mm/mm	-
TENSILE EXTENSION AT BREAK	ISO 527-3	MD	146.1	mm	-
		CD	65.2	mm	-
LOAD AT TENSILE STRENGTH	ISO 6383-1	MD	0.30	N	-
		CD	0.45	N	-
TEAR RESISTANCE	ISO 6383-1	MD	20.5	N/mm	-
		CD	30.2	N/mm	-
TENSILE STRESS AT TENSILE STRENGTH	ISO 6383-1	MD	0.82	MPa	-
		CD	1.21	MPa	-
BARRIER PROPERTIES					
WVTR	ASTM E 96		105	g/m²/24h	-
OTR	ASTM D 3985-5		1043	cm ³ /m ² /24h	-
THERMAL PROPERTIES					
MELTING POINT	ISO 3146		110	°C	-







Walki®Bioska Film 903

One of the latest fruits of our research is an extremely durable, industrially compostable packaging film. It has a variety of applications. As horticulture grow or soil bags/sacks, it provides excellent UV protection. It can also withstand rough treatment as a packaging envelope or film for e-commerce. We are also further developing this product into a compostable film that can be used in optical sorting.

We develop products to meet our customers' precise needs – such as biowaste bags that can be used in the optical sorting of biowaste at treatment facilities. Standard biowaste bags cannot withstand the vibrations and pressure blasting used in this process. Our latest arrival can. It's an effective substitute for plastic when you don't want any plastic to end up in fields at the end of the process.

Contact our sales team to get exactly the product you need.



Bioska's certificates



Bioska products have been awarded the Key Flag Symbol, which certifies that a product has been manufactured in Finland.





All Bioska products meet the European standard for industrial compostability, EN 13432. Some of the materials are also home compostable.



The quality assurance system at our production facility in Ylöjärvi meets ISO 14001:2015 and ISO 9001:2015 standards. We have certificates covering extrusion coating, polyethylene and adhesive lamination, dispersion coating, polyethylene printing and blowing, and biodegradable films.



The quality assurance system at our production facility in Ylöjärvi meets ISO 22000:2015 and SFS-EN 15593:2008 standards. Our certificates cover the development, manufacture, marketing and sale of inflatable polyethylene and biodegradable films, and laminated and plastic- or barrier-coated cardboard and paper.

PRODUCT NUMBER	PRODUCT NAME	SIZE (mm)	THICKNESS MY	COLOUR	PIECES / ROLL	ROLL / BOX	BOX / PALLET	ROLL / PALLET	EAN CODE
Bioska biowas	ste bags, sacks and inliners								
2005	Bioska óL	290x400	14	natural/light green	15	30	96	2,880	6414630020057
2010	Bioska 10L	375x450	15	natural/light green	15	36	96	3,456	6414630020101
1997	Bioska 20L	420x500	17	natural/light green	15	30	96	2,880	6414630019976
2201	Bioska 20L bag with handles	410×560	16	natural/light green	30	16	84	1,344	6414630022013
1991	Bioska 30L	500×500	20	natural/light green	20	15	96	1,440	6414630019914
1994	Bioska 35L	540×510	20	natural/light green	20	15	96	1,440	6414630019945
2006	Bioska 40 L	500x700	20	natural/light green	30	20	48	960	6414630020064
1993	Bioska 150L	750x1150	35	natural/light green	5	20	48	960	6414630019938
2008	Hauska small	200x300	18	green	30	20	180	3,600	6414630020088
2009	Hauska large, tie-able handles	200x360	18	green	30	20	180	3,600	6414630020095
1992	Bioska fruit-and-vegetable bags	350x450	12	green	300	6	32	192	6414630019921
1990	Bioska food sample bags	210x320	18	natural/white	50	10	240	2,400	6414630019907
Bioska shoppi	ing bags								
2610	Bioska shopping bags	280+2x90x560	24	white		500	30	15,000	6414630026103
Bioska bio inli	ners for containers								
1996	Bioska 75L	650×900	25	natural/light green	10	20	48	960	6414630019969
1999	Bioska 140L	850x1,400	20	natural/light green	7	15	48	720	6414630019990
1998	Bioska 240L	1,130×1,400	20	natural/light green	7	10	48	480	6414630019983
Bioska Plus bi	owaste bags and bio inliners								
2500	Bioska Home compost bag 20L	420x500	18	brown	20	18	96	1,728	6414630025007
2592	Bioska Plus 10L	375x450	18	brown	15	36	96	3,456	6414630025922
2597	Bioska Plus 20L	420x500	18	brown	15	30	96	2,880	6414630025977
2591	Bioska Plus 30L	500×500	20	brown	20	15	96	1,440	6414630025915
2017	Bioska Dry Toilet	600×700	20	green	30	10	48	480	6414630020170
Bioska Plus bi	o inliners for containers								
2596	Bioska Plus 75L	650x900	25	brown	10	20	48	960	6414630025960
2599	Bioska Plus 140L	850x1,400	20	brown	7	25	48	1,200	6414630025991
2598	Bioska Plus 240L	1,130×1,400	20	brown	7	15	48	720	6414630025984

Standard product list

Bioska's values

We seek to embody responsibility, innovation and courage in everything we do. Sustainable development guides all of our actions. **bioska**[°] Ylöjärvi

The next chapter in Bioska's story as a part of the global Walki Group

Plastiroll, the company that makes Bioska in Ylöjärvi, became Walki Plastiroll in May 2019. Walki is one of Europe's largest manufacturers of biodegradable bags and packaging films. We have over 20 years' experience in developing and manufacturing compostable materials.

In addition to our best-known consumer products – Bioska and Hauska – we also manufacture extrusion-coated and compostable paper- and cardboard-based packaging materials for the manufacturing industry. Bioska and Hauska play a key role in Walki's strategy. We strive to ensure that all materials we use must be renewable, fully recyclable or 100% compostable.



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