



**BIO
logical
straws**

Product Catalogue
2020



Bio-Strohhalme.com

Wir l(i)eben nachhaltige Trinkhalme!



Sustainable completely biodegradable and quickly compostable drinking straws offered across Asia Pacific by LILY FLD Limited, APAC Liaison Office of Bio-Strohhalme GmbH, Germany. All our straws are plastic free and made and certified in the EU.



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1 | Bio-Pot straws



Material

Thermoplastic starch material (potato and sugar beet) and natural fillers (magnesium and calcium), 75% renewable resources. 69% biobased carbon share according to ASTM D6866, certified TÜV Austria *OK biobased* cert. TA8071300301. Fully plasticizer-free, GMO-free and without any petroleum-based plastic. Food safe and compliant with EU regulations on food safety and food contact materials.

End-of-Life

Household waste | Food waste solutions | Completely biodegradable 18-21 months and quickly compostable 60-90 days in an industrial facility according to DIN EN 13432. Certified TÜV Austria *OK Compost Industrial* cert. TA8011702428 and *Seedling* cert. 7W2005 | Recyclable | Incineration without releasing toxins.

Manufactured in the EU (Germany/Italy). Resin of German origin.

For cold drinks up to 40°C / 104°F.

Shelf life 18-21 months in dry storage conditions away from direct sunlight, room temperature.

Colours: black - milky white.

Sizes: 7x135m - 7x160mm - 7x210mm straight - 6x210mm with bend - 8x250mm.

Customization: direct print in 1c/2c or individual wrapping (plain/1c/2c) or custom length.

Packed in semi-transparent biodegradable *OK compost* bags (500 pcs x 20/12 packs).



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2 | Bio ECO straws



Material

Thermoplastic starch material (sugar cane) and natural fillers (magnesium and calcium), 70% renewable resources. 67% biobased carbon share according to ASTM D6866, certified TÜV Austria *OK biobased* cert. TA8071400361. Fully plasticizer-free, GMO-free and without any petroleum-based plastic. Food safe and compliant with EU regulations on food safety and food contact materials.

End-of-Life

Household waste | Food waste solutions | Completely biodegradable 18-21 months and quickly compostable 60-90 days in an industrial facility according to DIN EN 13432. Certified TÜV Austria *OK compost INDUSTRIAL* cert. TA8011702244 | Recyclable | Incineration without releasing toxins.

Manufactured in the EU (Germany/Italy). Resin of German origin.

For cold drinks up to 40°C / 104°F.

Shelf life 16-22 months in dry storage conditions away from direct sunlight, room temperature.

Colours: translucent white - pearlescent black - red - green - yellow - blue.

Sizes: 6x210mm - 6x250mm.

Customization: direct print in 1c/2c or individual wrapping (plain/1c/2c) or custom length. Custom colours to come soon.

Packed in semi-transparent biodegradable *OK compost* bags (500 pcs x 20/12 packs).



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3 | Grass Paper straws

Material

30% fibre from fresh fibres of hay and 70% wood cellulose minimizing the proportion of wood-based pulp in the mix to save water and energy. The hay comes from compensation areas that are used neither for food nor for animal feed agriculture. FSC cert. N002967. Compliant with EU guidelines for paper products coming into contact with food.

End-of Life

Household waste | Food waste solutions | Completely biodegradable and quickly compostable | Recyclable | Incineration.

Manufactured in the EU (Germany). All raw materials, paper components and natural-based glue of German origin.

What are the main advantages of our grass paper straw compared to a regular paper straw?

No chemical processing required. **Water savings** | Only two litres of fresh water are required to produce one tonne of hay compared to 6,000 litres per one tonne of wood cellulose. **Energy savings** | Grass requires less energy than wood to convert into fibre, reducing CO2 emissions during manufacturing. **Efficient output** | 1.2 tonnes of hay give one tonne of grass fibre material.

Not disintegrating in drinks for at least 2 hours.

We do not recommended our grass paper straw for hot beverages.

Shelf life 5-6 years in dry storage conditions.

Colour: natural tone and textured surface.

Sizes: 6x210mm..

Customization: direct print in 1c/2c or individual wrapping (plain/1c/2c) or custom length.

Packed in environmentally friendly craft paper boxes (500 pcs x 10 boxes).



4 | Original Natural straws

Material and Process

Rye or wheat stalks responsibly sourced from sustainable and certified farmland in the European Union. No additional cropland is required as the farmers grow rye and wheat for the food industry. Once the grain goes into food production, the stalks are hand-harvested and sorted before being treated in a chemical free, multi-stage cleaning and drying process. Sanitised and treated without the use of chemicals, bleach or chlorine. Hygienic and food safe as per EU regulations.

End-of-Life

Household waste | Food waste solutions | Completely biodegradable and quickly compostable within a very short time | Incineration.

Handcrafted in the EU (Germany).

Gluten free, hypoallergenic, dermatologically tested and found suitable for persons with allergies. Vegan.

Neutral in taste. **SIMPLE YET CHIC DESIGN.**

Suitable for hot and cold drinks.

Not recommended for thick beverages and smoothies (3-5mm width).

Shelf life 5-6 years in dry storage conditions.

Colour: natural tone and hue, unbleached.

Sizes: diameter 3-5mm, available lengths 15cm / 20cm / 23cm.

Customization: direct print in 1c.

Packed in environmentally friendly carton boxes (2,500 pcs per carton).





5 | Bio-Thermo 95°

Material

60% biobased out of renewable resources and mineral fillers of natural origin. Fully plasticizer-free without any petroleum-based plastic. Food safe and compliant with EU regulations on food safety and food contact materials.

End-of-Life

Household waste | Food waste solutions | Completely biodegradable 18-21 months and quickly compostable 60-90 days in an industrial facility according to DIN EN 13432 | Recyclable | Incineration without releasing toxins.

Manufactured in the EU (Germany/Italy). Resin of German origin.

For HOT drinks up to 95°C / 203°F.

Shelf life 12-14 months in dry storage conditions away from direct sunlight, room temperature.

Colour: milky white.

Sizes: 7x210mm - 7x240mm.

Customization: direct print in 1c/2c or individual wrapping (plain/1c/2c) or custom length.

Packed in semi-transparent biodegradable *OK compost* bags (500 pcs x 20/12 packs).





6 | Paper straws

Material

Premium quality wood cellulose. FSC cert. N002967. Compliant with EU guidelines for paper products coming into contact with food. US FDA approved, test method 21 CFR 176.170. Without any plastic lining or plastic coating, still highly stable and shape retaining when immersed in liquids.

End-of-Life

Household waste | Food waste solutions | Completely biodegradable and quickly compostable | Recyclable | Incineration.

Manufactured in the EU (Germany). All raw materials, paper components and natural-based glue of German origin. Inks are high quality and food grade food dye colours.

Not disintegrating in drinks for at least 2 hours.

Not recommended for hot beverages as the pulp material naturally softens quicker in hot liquids.

Shelf life 5-6 years in dry storage conditions.

Colour: various colours (stripes and solid).

Sizes: various sizes (diameter 6mm / 8mm for smoothies; in different lengths of 15cm / 20cm / 21cm / 25cm)

Customization: direct print in 1c/2c or individual wrapping (plain/1c/2c) or custom length or entirely customized with your own artwork, pattern or colour. **PRINTITUP!**

Packed in environmentally friendly craft paper boxes (500 pcs x 10 boxes).

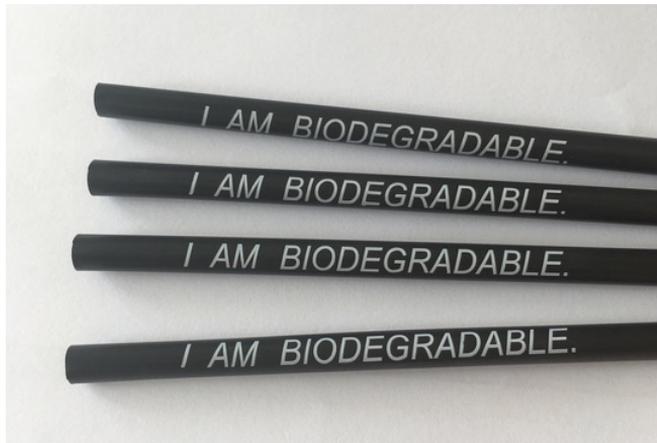


7 | Application straws for portion packages

Bio-Pot (straight or u-shaped) or paper straw for the beverage industry's carton packages of juice and milk drink. Straws are one-side pierce cut and individually shrink wrapped in belt form in either PP, PLA or paper for hot or cold glue depending on your facility.

8 | Last but not least: We CUSTOMIZE

Direct print in 1c or 2c, or full paper print in your pattern and colour, or individual wrapping in plain or 1c or 2c or fancy sleeves in your own artwork. Email us to find out details and receive our best offer for your marketing tool.





Contact Us

*Although our straws are biodegradable, they should only be disposed of in a controlled waste management environment. **We do not encourage littering!***