YOUR STRAWS FOR 2020?

Detailed presentation

OSTONE TO NATURALLY RESISTANT

SIRET - 853 578 847 00016 | CODE NAF - 4690Z







Click here to discover the ANCE 10 strengths of OSTONE

OSTONE is a French company that offers an ecological, economical and resistant straws alternatives to the catering, mass retail and event industries. We currently offer the following product.

Strong Fibers Straw

Our company is born from a statement showing a desire for change on the part of consumers and companies. This change in mentality, particularly towards the misuse of disposable plastic, has led to new French and European legislation. This environmental dimension has also led companies to think about a social-environmental dimension. OSTONE is the result of a growing demand for viable alternatives for both the environment and the consumer.

straw seen from the inside long view pointing to the future transparency with the customer

- 2 "()"
- 2 solutions
- 2 materials
- 2 straws

choice (a target) 1 price OSTONE

"stone" = natural resistance

1 world, without planet B

OUR 3 VALUES Ø



Our straw is **biodegradable in 4 months**, our straws are 100% biobased. Our products are **recyclable in conventional centers** and
compostable.



Our solution have **affordable price** compared to other viable alternatives on the market. We want our customers to be **fully involved** in the change and evolution of straw.



Our straw made of strong fibers is able to resist 1 hour in water at 100° C.

Composed only of 3 layers of paper to ensure optimal recyclability.

OUR ENGAGEMENTS

OBJECTIVES

Minimize the environmental impact of our straws

SUPPLY CHAIN RESPONSIBLE

Choice of our carriers, optimization and communication of the carbon footprint of our shipments

QUALITY

Choice of our suppliers, certified, controlled, patented materials, touched, taste

TRANSPARENCY

Carbon
balance,
composition,
communication
and sources

TRACEABILITY

Complete traceability of our products, sustainably managed forests, certified stone quarry

AN EVOLVING EUROPEAN LEGISLATION



IN EUROPE

In January 2021, a European law will ban to sell or provide some single-use plastic products such as plastic straws.



IN FRANCE

France has anticipated this legislation and the European calendar by advancing this bill to January 2020. The Environmental Code will also apply this law to plates, cutlery, cups and plastic bags.

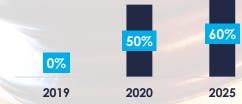
Source: <u>legifrance.gouv.fr</u>



MANDATORY BIO-SOURCED MATERIAL PERCENTAGE

The decree of August 30, 2016 specifies the minimum bio-sourced content of compostable disposable tableware. It will increase gradually:

- **50%** in January 2020
- **60 %** in January 2025



Bio-sourced products are non-food industrial products obtained from renewable raw materials derived from biomass (plants for example) such as corn starch, textile or cellulose fibers ...

The plastic straws will be on the list of the banned products on the French market for January 2020.

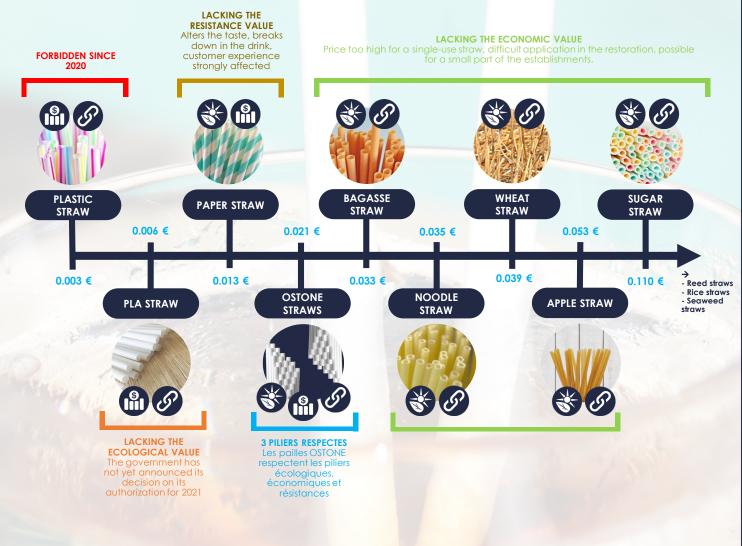
OUR STRAWS

The percentage of bio-sourced materials that our straws are made of is much higher than the 2020 or 2025 bill.

 Strong fibers straw made of 100% bio-sourced materials



OUR POSITIONING



CLASSIC PAPER STRAW ...

Several companies have tried to substitute their plastic straws with paper straws. Unfortunately, it was a failure for the majority. Conventional paper straws have a limited life in contact with water (~ 6 minutes). This degradation alters the taste of the drink and affects the consumer experience.

PLA GREENWASHING

OSTONE engages in a war against straws in PLA! PLA-based ecological straws are not This alternatives. product contains only 69% of biobased material. Due to their complex composition these straws are not recyclable in conventional centers. The 31% of toxic plastic component will be deposited in nature and at the bottom of the oceans in the form "microplastic". This alternative is a solution for groups that want to economically upgrade in the legislation. Note that government ' has not vet announced its decision on its authorization for 2021.

^{*} Estimate HT prices for 6 mm inner diameter, length 210 mm amounts between 200 000 and 500 000 straws, including delivery.



AN EXCEPTIONAL CELLULOSE FIBER

A complex technique that will optimize the position of cellulose fibers in such a way as to improve the strength of the overall paper structure.

In addition, a biodegradable certified glue for food contact is added, allowing the fibers to attach to each other, thus locking the structure. The wet filaments are then dried. By retracting, they form a very strong cellulose fiber.





Patented winding technology



ECOLOGICAL INTERMEDIATE Ø



This fiber is very resistant, giving an exceptional stiffness to this paper, 20 times stronger than conventional paper, 100% biodegradable and recyclable in nature in a few months. This formula is an intermediary between the strength and the biodegradable aspect of traditional paper straw.



THE STRONG FIBER **STRAW IS**

RECYCLABLE

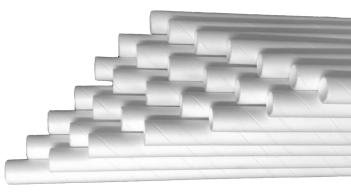
BIODEGRADABLE

RESISTANT

COMPOSTABLE

ECONOMIC

"20 X **MORE STRONGER** THAN CLASSIC PAPER



A BIODEGRADABLE AND RESISTANT STRAW

OSTONE offers a 100% biodegradable cellulose straw that can withstand water for one hour (100 ° C). Our straw has the certifications:

- SGS ISO 9001
- Direct Food Contact Food Grade FDA
- FSC certified (Forest Steward Council)
- RoHS and REACH certified





A 100% BIODEGRADABLE STRONG MIXTURE

Our cellulose fiber straws are 20 times stronger than conventional paper straws. They also retain the characteristics of conventional paper straw in terms of carbon footprint, energy used, etc.

This paper contains no polymer, it is 100% biobased. Our resistant fiber straws do not affect the taste of the drink during use.

Our strong fiber straws are made only from food grade materials, **no hazardous or toxic materials** are included in their composition.

HOW TO TREAT WASTE OF OSTONE STRAWS?

GENERAL WASTE FLOW Landfill or incineration, in France use of the green bin.

RECYCLING (recommended):

- Commercial / industrial composting
- Recycling of paper, in France use of the yellow bin.

Our straws are recyclable in conventional recycling centers.

RETAIL RANGE

Our retail range currently contain 3 formats (24/48/96 units). Our Kraft paper packaging is also completely recyclable.

For the moment, we propose only a 6 mm diameter, 210 mm length.





WHOLESALER RANGE

We offer degressive wholesale rates on volume. Packed in Kraft paper bags. Possible length between 120 – 250 mm.

Click on the diameter to obtain a price estimate

Diameters (mm):

10

We do not offer custom logo or printed patterns on our straws, they are only white, original and natural color.

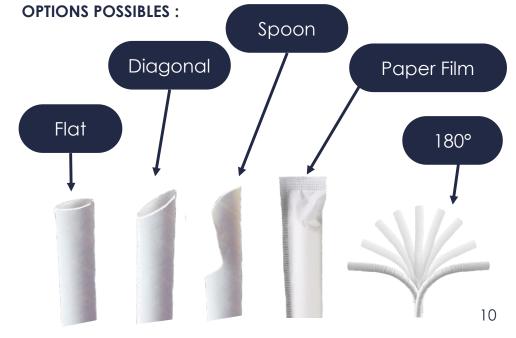


Click here to see the technical sheet



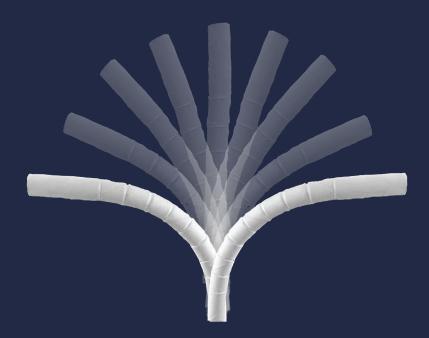






Range 180.

Our range of 180 paper straw is the latest technical challenge between plastic straw and paper straw.



This straw is made of 9 rings that make it flexible, it is foldable at 180°. The 180 range is available with our tough cellulose fibers.

Range 360.

Our range 360 is perfectly adapted for the large distribution and the drinks in individual bricks ex. Tetra Pak. This straw has a 360 ° flexibility. We recommend a diameter of 4 mm for this type of straw available with our resistant cellulose fiber. We are ready to accompany you in large projects.





OSTONE FOCUSED ON WHITE

A straw made of super strong paper is fine but why not go further by developing a range of paper straws with different patterns and colors printed on the straw?

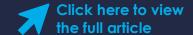
Colored straws would certainly be **more esthetic but riskier** for the consumer. OSTONE is aware of the still uncontrolled danger of so-called "food safe" inks which must make a case-by-case analysis.

Food safety inks must be evaluated and tested for each food product, packaging material and consumer use to detect potential interactions.

If you really want to have some color for your paper straws while keeping the security aspect it will come down to saying that it would be necessary to certify for each of your drinks, cocktails ... that the ink does not have any dangerous interaction. with the drink. In concrete terms, it is a very complicated thing.

That's why OSTONE offers a quality-controlled product and chose to keep the natural color of paper, white.

Sources: 20minutes.fr - capital.fr - emballagesmagazine.com





NOW YOU MUST CHOOSE YOUR STRAW ...

PRODUCTION 1000 KG	STRONG FIBERS STRAWS	CLASSIC PAPER STRAWS	PLASTIC STRAWS
Carbon footprint	1431 Kg CO2	1431 Kg CO2	3271 Kg CO2
Energy used	20.4 GJ	20.4 GJ	105 GJ
Trees	18	18	-
Water used	2770 liters	2770 liters	100 000 liters
Waste generated	5 x recyclable	5 x recyclable	yes
Biodegradable	100%	100%	0%
Photodegradable	-	-	0%
Water resistance 100°C	+ 1 hour	- 1 minute	••
Water resistance 20°C	2 hours	6 minutes	••
Alters the taste	no	yes	no
Decomposition	~ 4 months	~ 4 months	1000 years

Source: KIWA

OSTONE TM NATURALLY RESISTANT



In parallel, we are developing **a hybrid truck transport** project to minimize our carbon impact, deployed by the end of 2020.

A RESPONSIBLE SUPPLY CHAIN



Bolloré Logistics is our logistics partner. OSTONE commits to communicate the carbon emission rate of each of its deliveries.





OUR WISH

« Offer consumers an affordable, disposable and eco-friendly alternative to plastic straw while correcting the strength defects of conventional paper straw. »

« Go further in our commitment to zero disposable plastic by accompanying our prospects and customers in their ecological transition. »

Do not hesitate to contact us for any further information / clarifications.







SAS OSTONE

<u>contact@ostone.fr</u> <u>www.ostone.fr</u> Sembadel Gare,

43160, Sembadel, France Tél: +33 (0)9 72 38 20 75

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