

# the ocean straw.

compared with

- PP straws
- Paper Straws
- PLA straws
- Bagasse straws
- Bamboo fiber straws



[www.theoceanstraw.com](http://www.theoceanstraw.com)

Features	Plastic Straws (PP)	The Ocean Straw
Material Composition	Polypropylene (PP) - Fossil-based	Wood dust + plant-based binders + non bio-based biodegradable polymers - Made in Finland
Biodegradability	Not biodegradable - can persist for hundreds of years in nature	3-6 months in composting facilities. 2 to 5 years in nature.
Reusability	No - Not intended for reuse	Reusable multiple times - Dishwasher safe 10 times
Production Process	Extrusion (melted material forced into a die). Mainly sourced from China, no guarantee it is free from child labor	Extrusion (melted material forced into a die) - Made in Spain
Durability	High durability - Suitable for hot & cold drinks	High durability, comparable to plastic straws.
Material carbon footprint	1,7 kg CO2 emissions per kg material	1,2 kg CO2 emissions per kg material
Recyclability	Mechanically recyclable (widely recycled)	Compostable - Can be recycled in existing organic waste streams.
PFAs	May contain PFAs for coating	No - no intentionally added PFAs
SUPD and PPWR	non-compliant	SUPD compliant - Aligns with PPWR requirements

Features	Paper Straws	The Ocean Straw
Material Composition	Paper + water-resistant coating	Wood dust + plant-based binders + non bio-based biodegradable polymers - Made in Finland
Biodegradability	1-2 months in composting facilities - 1 to 6 months in nature but may contain glue that can break down into microplastic	3-6 months in composting facilities. 2 to 5 years in nature.
Reusability	No - Single use	Reusable multiple times - Dishwasher safe 10 times
Production Process	Winding process: layers of paper spirally wrapped around a mold and glued together. Mainly sourced from China, no guarantee it is free from child labor	Extrusion (melted material forced into a die) - Made in Spain
Durability	Low durability, get soggy after 30 minutes and dissolve in liquids.	High durability, comparable to plastic straws.
Material carbon footprint	1,5 to 2,5 kg CO2 emissions per kg material	1,2 kg CO2 emissions per kg material
Recyclability	Mechanically recyclable through paper recycling (but water-resistant coatings may limit recycling)	Compostable - Can be recycled in existing organic waste streams.
PFAs	May contain PFAs for coating	No - no intentionally added PFAs
SUPD and PPWR	SUPD compliant - May not align with PPWR due to intentionally added PFAs.	SUPD compliant - Aligns with PPWR requirements

Features	Bagasse Straws	The Ocean Straw
Material Composition	Bagasse (sugarcane fiber) + binders.	Wood dust + plant-based binders + non bio-based biodegradable polymers - Made in Finland
Biodegradability	3-6 months in composting facilities. Up to 1 year in nature.	3-6 months in composting facilities. 2 to 5 years in nature.
Reusability	No - Not intended for reuse	Reusable multiple times - Dishwasher safe 10 times
Production Process	Injection molding (melted material injected into a mold) - Mainly sourced from China, no guarantee it is free from child labor	Extrusion (melted material forced into a die) - Made in Spain
Durability	Moderate durability - Single-use, not suitable for hot drinks	High durability, comparable to plastic straws.
Material carbon footprint	1 to 1,5 kg CO2 emissions per kg material.	1,2 kg CO2 emissions per kg material
Recyclability	<ul style="list-style-type: none"> <li>• Organic recycling: Industrial composting</li> <li>• Not easily mechanically recyclable - Fiber structure not ideal for repurposing.</li> </ul>	Compostable - Can be recycled in existing organic waste streams.
PFAs	May contain PFAs for coating	No - no intentionally added PFAs
SUPD and PPWR	SUPD compliant - May not align with PPWR due to intentionally added PFAs.	SUPD compliant - Aligns with PPWR requirements

Features	PLA Straws	The Ocean Straw
Material Composition	Corn starch + binders	Wood dust + plant-based binders + non bio-based biodegradable polymers - Made in Finland
Biodegradability	3-6 months in composting facilities. Up to 30 years in nature.	3-6 months in composting facilities. 2 to 5 years in nature.
Reusability	No - Not intended for reuse	Reusable multiple times - Dishwasher safe 10 times
Production Process	Injection molding (melted material injected into a mold) - Mainly sourced from China, no guarantee it is free from child labor	Extrusion (melted material forced into a die) - Made in Spain
Durability	Moderate durability - Single-use, not suitable for hot drinks	High durability, comparable to plastic straws.
Material carbon footprint	1,5 to 2,5 kg CO2 emissions per kg material	1,2 kg CO2 emissions per kg material
Recyclability	<ul style="list-style-type: none"> <li>Organic recycling: Industrial composting</li> <li>Not easily mechanically recyclable</li> </ul>	Compostable - Can be recycled in existing organic waste streams.
PFA's	May contain PFA's for coating	No - no intentionally added PFA's
SUPD and PPWR	SUPD compliant - May not align with PPWR due to intentionally added PFA's.	SUPD compliant - Aligns with PPWR requirements

Features	Bamboo Fiber Straws ( <i>Euro Straws</i> )	The Ocean Straw
Material Composition	Bamboo fiber + binders - Mainly sourced from Asia, no guarantee it is free from child labor	Wood dust + plant-based binders + non bio-based biodegradable polymers - Made in Finland
Biodegradability	3 months	3 to 6 months in composting facilities, 2 to 5 years in nature.
Reusability	Yes, multiple use - Manually washable	Reusable multiple times - Dishwasher safe 10 times
Production Process	Dry molding (under heat and pressure) - Made in Germany	Extrusion (melted material forced into a die) - Made in Spain
Durability	Moderate durability - short-term use and not suitable for acidic or hot drinks drinks..	High durability, comparable to plastic straws.
Material carbon footprint	1,2 to 2,5 kg CO2 emissions per kg material.	1,2 kg CO2 emissions per kg material
Recyclability	<ul style="list-style-type: none"> <li>● Organic recycling: Home composting</li> <li>● Not easily mechanically recyclable: Natural fiber + binders not ideal for repurposing in new material.</li> </ul>	Compostable - Can be recycled in existing organic waste streams.
PFAs	??? - PFAs are not tested for the home-compostability certification by DinCertco	No - no intentionally added PFAs
SUPD and PPWR	SUPD compliant - May not align with PPWR due to intentionally added PFAs.	SUPD compliant - Aligns with PPWR requirements