



EARTHWORKS

Nature's own elements!

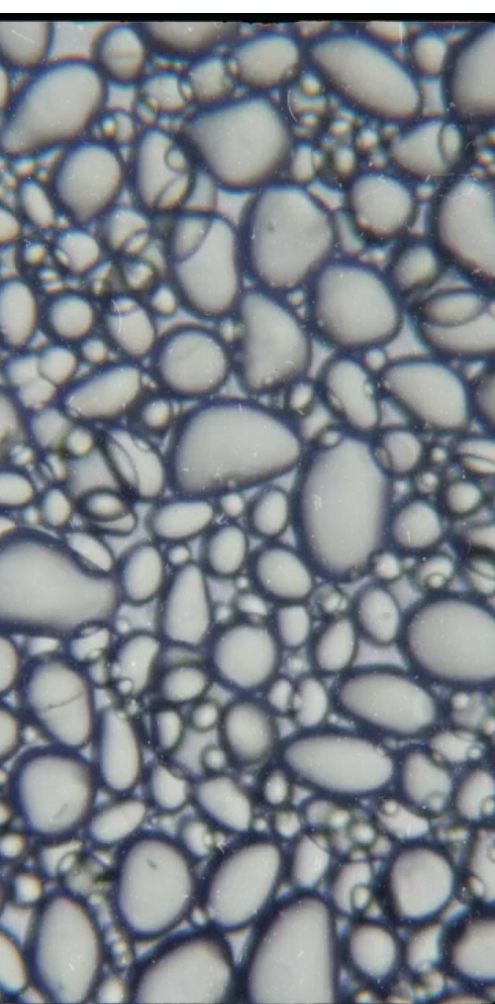
Product Catalogue

www.earthworks.bio



Materials we use today
will shape the future we
leave for Tomorrow!

We are working to create value added
products from bio-based materials to ensure
environmental compatibility



We work with different agro-wastes , natural fibers and use plant based, biodegradable polymers as binders to create the Bio-composite!



Product Features



Manufacturing Process Compatibility: Material is well suited for Injection molding, Extrusion molding and Compression molding.



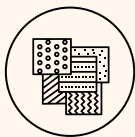
Valorisation of waste: We use feedstocks such as agro-waste, natural fibers, biodegradable and microbial polymers.



Aesthetics: All our products can be tailor made with biobased color masterbatches on request.



Embossing: Products made with our material can undergo embossing.



Texture: Products made from our material feature a matte finish with a natural fiber texture.



End of life: Products made from our material are both industrially and home compostable, depending on the end application. We also have materials which are recyclable and, in the end, can be composted.

Current feedstocks used for our materials



Bamboo Fiber



Coconut Fiber



Tender
Coconut Husk



Seaweed



Citric fruit by
product



Brewery spent
grains



Rice and
Wheat husk



Areca nut



Coffee and
Tea grains



Cosmetic cream jars and Spatulas



Cosmetics cream
Applicators /
Spatulas



Developing home compostable version



Custom design for mold available

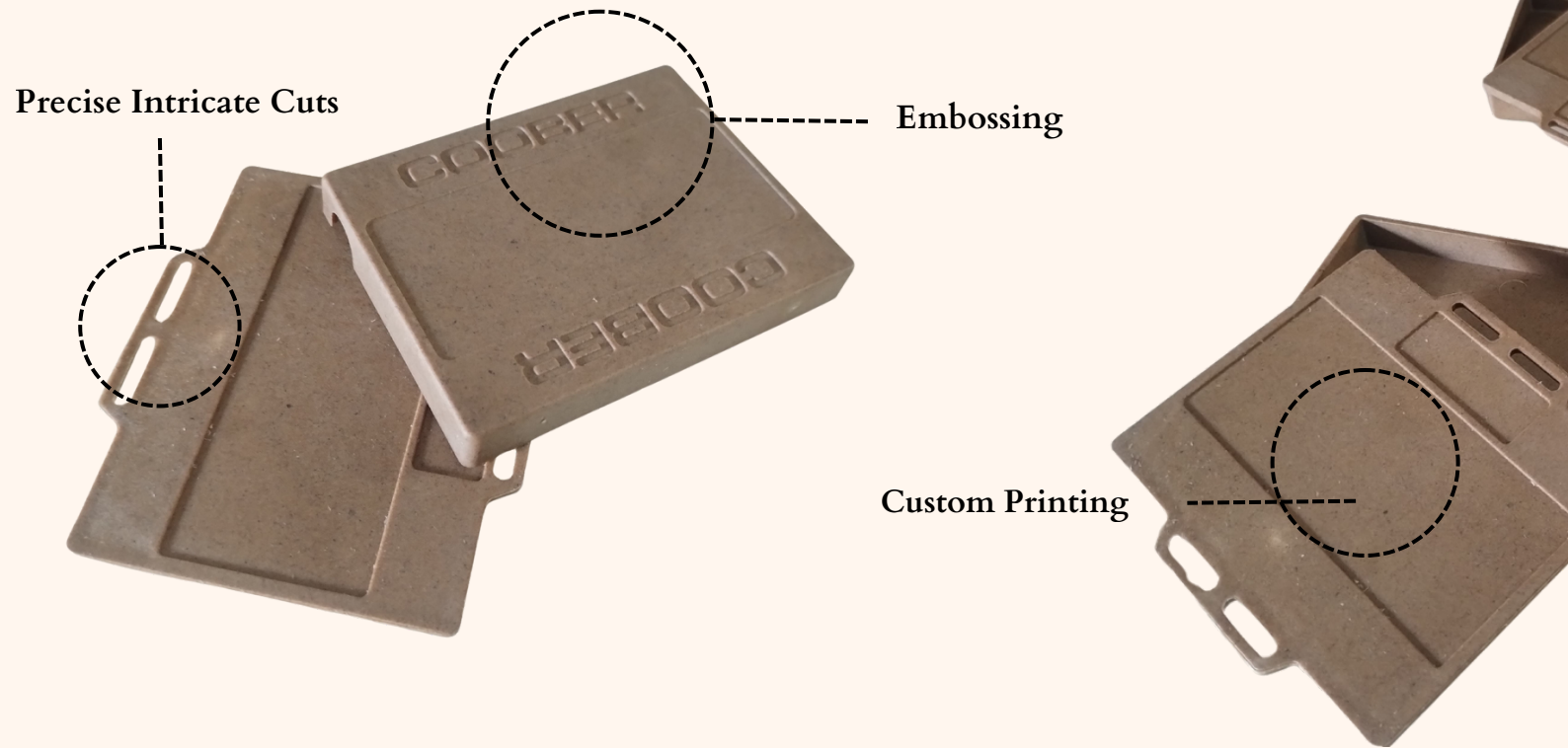


Biodegradable color masterbatches can be used to provide different colors.



Matte finish and different color masterbatches available

Rigid Boxes



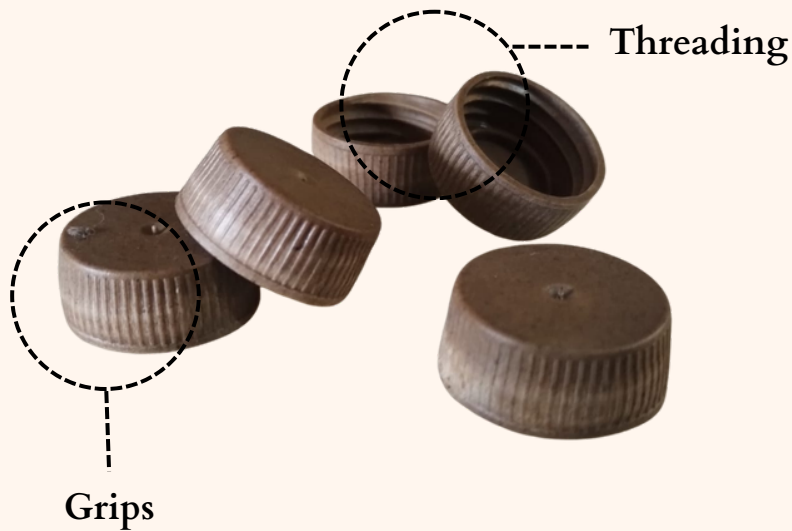
Home compostable and
Industrially compostable
grades available



Matte Finish with
Natural Fiber Texture



Caps and Closures



Leak proof



🌿 Caps for water bottles, falcon tubes et.al. also can be get for other applications

🌿 Home compostable and Industrially compostable grades available

🌿 Leak Proof with Liquid content

🌿 Biodegradable color masterbatches can be used to provide different colored caps and closures





Beverage cups



Can be used for cold beverages and
at room temperature
(*Note : Tests are currently underway for
hot beverages)



Biodegradable color
masterbatches can be used
to provide different colored
cups



Customised designs
available



Boxes with eco-friendly coating



Oil and grease resistant



Sizes can be customised



Sogginess and moisture control



Customised logo and branding



Reusable Cutlery



Matte Finish with Natural Fibers Texture



Available in different designs



Has passed overall and specific migration test for food contact as per FSSAI specifications



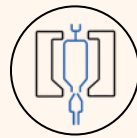
Home compostable and Industrially compostable grades available



Granules are
suitable for:



Injection
Molding



Extrusion
blow Molding



Compression
Molding



EARTHWORKS™

Bio-composites made from agro-waste and biodegradable polymers

Product Data

Composition: Agro-waste fibers and biodegradable polymers.

Typical Properties : The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Sr. No.	Name of the test	Test Method	Unit	Result Obtained
1.	Melt Flow Index (190°C, 2.16 kg)	-	g/10 min	12-20
2.	Density @ 25°C	ASTM D 792	g/cc	1.23
3.	Water Absorption	ASTM D 570	%	0.61
4.	Tensile Strength @ Yield	ASTM D 638	MPa	24.3
5.	Flexural Strength	ASTM D 790	MPa	39.1
6.	Compressive Strength	ASTM D 695	MPa	24.6
7.	Impact Strength (Notched Izod)	ASTM D256	kJ/m ²	1.5-3.4
8.	Embodied carbon footprint	CIBSE TM65	Kg of CO ₂ e	1.647

Food Contact: Passed Overall migration and specific migration as FSSAI specifications.

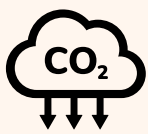
Storage and Transportation Storage < 45 °C. Protect from moisture. Store in a closed container. Keep in dry conditions and avoid exposure to high humidity and rain. Keep away from direct sunlight.

Supplied as: Granules

Applications: For Injection Molded Parts



Impact of choosing our products



1kg of our Earthworks material has a 30% to 40% lower carbon footprint than conventional plastics

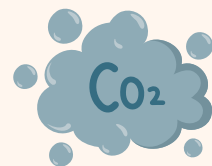
60%

Less water consumed
vs. conventional extraction methods



4×

CO₂ removed per 100g seaweed
Carbon-negative feedstock by nature



~1 t

Plastic replaced to date
Across food, cosmetics & materials







Get in touch!

Hope for a long term association



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www.earthworks.bio