

Product Features



Injection Molding: The material is well-suited for injection molding processes



Extrusion coating: Our material is also compatible with extrusion manufacturing techniques and can be coated on paper substrates



Compression Molding: The material is suitable for compression molding process



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



Embossing: Products made with our material can undergo embossing



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



Compostability: Products made from our material are both industrially and home compostable, depending on the end applications



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

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

Cutlery





- Matte Finish with Natural Fibers Texture
- Has passed overall and specific migration test for food contact as per FSSAI specifications
- Available in different designs
- Home compostable and Industrially compostable grades available

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

Bottle Caps





- Caps for water bottles, falcon tubes et.al.
- Leak Proof with Liquid content
- Home compostable and Industrially compostable grades available



Visiting Card Holder





Home compostable and Industrially compostable grades available



Matte Finish with Natural Fiber Texture



Material in form of granules



Granules are Suitable for



Injection Molding



Extrusion blow Molding



Compression Molding

EARTHWORKS TM

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	19.50
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 CO2e	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



Carbon Emission Equivalent of 1 Kg of Our Granules is equivalent to



6 Liters of Water



15 Kms of travel by an Airplane



8-9 Pairs of clothes Ironing





Get in touch!

Hope for a long term association

- +91-9886996673
- trupti.arabatti@earthworks.bio
- www.earthworks.bio