

Product Description

UBQ Industrial is a bio-based thermoplastic material replacement that offers climate-positive function and reliability in operational uses. Neutral in appearance for applications not requiring a smooth finish, this circular, recyclable material replacement delivers practicality and value in sustainable applications, especially in building and construction, logistics and supply chain, and infrastructure, helping companies meet their climate targets in more areas throughout their enterprises.

Primary use is for applications where a positive environmental impact is desired.

Physical Properties

Form: Tablets

Color: Gray

	REFERENCE	UNIT	TEST METHOD
Bulk Density	In process**	g/cm ³	Internal Test
Moisture content (as produced)*	<2*	%	ASTM D6980
Particle-size distribution	<2000	micrometer (µm)	ASTM E11
Density	In process**	g/cm ³	ASTM D792

*Reported moisture value refers to testing done during UBQ production process according to standard testing plan.

**The properties will be defined after the production of three commercial batches.

Specifications are re-evaluated periodically.

UBQ reserves the right to modify any specifications, results and tolerances.

Life Cycle Assessment

Carbon Accounting Impact

Amount of carbon in every kg of UBQ Industrial

Cradle-to-Gate Global Warming Potential (GWP)100 results are presented in Table 1

This value does not include the avoided emissions by substituting plastic, rubber or wood.

Indicator (Unit)	Total cradle-to-gate
UBQ Production Emissions (includes Fossil fuel and Land use) (kg CO ₂ eq)	0.15
UBQ Biogenic Carbon Removal (kg CO ₂ eq)	-1.17
Total UBQ Carbon Footprint (kg CO ₂ eq)	-1.02

Table 1. GWP impact indicators using the -1/+1 approach.

Beyond Carbon Accounting Impact

Amount of carbon avoided in carbon equivalent methane emissions by every kg of UBQ Industrial Cradle-to-Gate Global Warming Potential (GWP)₂₀ results are presented in Table 2
This value does not include the avoided emissions by substituting plastic, rubber or wood.

Indicator (Unit)	Total cradle-to-gate
UBQ Avoided Emissions (kg CO ₂ eq)	7.6

Processing Methods

Injection molding, extrusion, compression molding, 3D printing and rotomolding

- Suitable for use on its own where final product characteristics permit.
- Processing temperature should not exceed 190°C (374°F).
- Suitable for compounding/dry blending with polymers and elastomers where the processing temperature does not exceed 190°C (374°F).
- UBQ Industrial must be pre-dried at 60°C (140°F) max prior to processing.

Storage

- UBQ Industrial is packaged in bags.
- Store the material in dry and cool conditions.
- In the original packaging, UBQ Industrial can be stored up to 24 months under normal storage conditions.

Health and Safety Information

- For specific information about safety in handling and processing, please request the Material Safety Data Sheet via email at msds@ubqmaterials.com.
- UBQ Industrial is not intended for direct contact in food, liquid, or chemical applications.

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