CIRCULARITY PASSPORT® PRODUCTS

EPEA
PART OF DREES & SOMMER

Passport Number 0001
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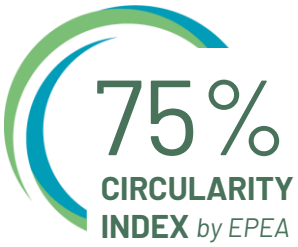
Valid until: 06.10.2027
Passport Version 2.0

HOLCIM — CPC-CONCRETE ELEMENTS

_ INNOVATION STORY

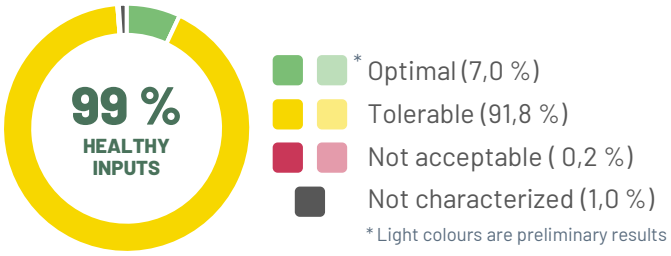
This product provides a light-weight and high-quality alternative for steel reinforced concrete elements. Its design allows for a long first use and product reuse. Upon the end of use the product can be cycled via designated concrete recycling streams. Innovation potential still lies in a separate recycling of carbon fibers.



_ CRADLE TO CRADLE METRICS

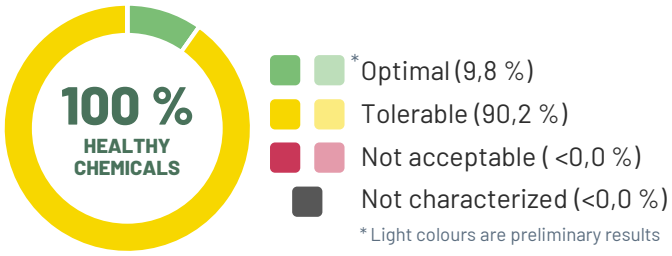
All figures by weight

Material Health of Inputs



* Light colours are preliminary results

Material Health of Chemicals



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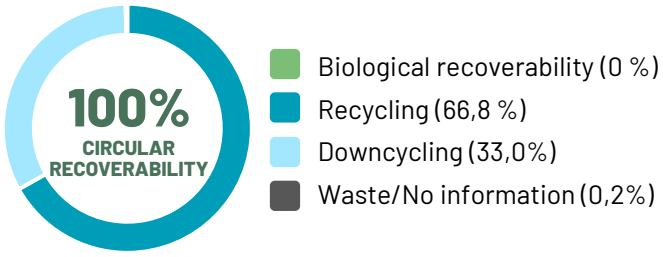
Sourcing

Recoverability



_ RENEWABLE ENERGY: 100%

_ CARBON FOOTPRINT: 100% offset through CO_2 certificats.

_ PRODUCTION, USE AND AFTER-USE SCENARIO

Material Health: The following intended scenarios have been considered: final manufacturing, use according to user manual, recycling via designated disposal at a concrete recycling facility. The following unintended and unwanted after-use scenarios have been considered: landfilling, uncontrolled burning.

Sourcing: The analysis is based on verified supplier information. In this project 0% post-consumer recyclate or responsible harvesting inputs were identified.

Recoverability: Materials intended for circular use were identified and recycling test reports were provided for the after-use scenario: concrete recycling via a designated service provider. The tests confirmed the suitability of est. 67% for type 1 concrete after recycling (s.a. "Recycling"). During the recycling process, some carbon fibers remain in the concrete material. Material health implications for this were assessed and deemed acceptable.

CIRCULARITY PASSPORT®
PRODUCTS
ADDITIONAL INFORMATION

EPEA
PART OF DREES & SOMMER

Passport Nr.: 00001

GLOSSARY

_METHODS AND INSTRUMENTS

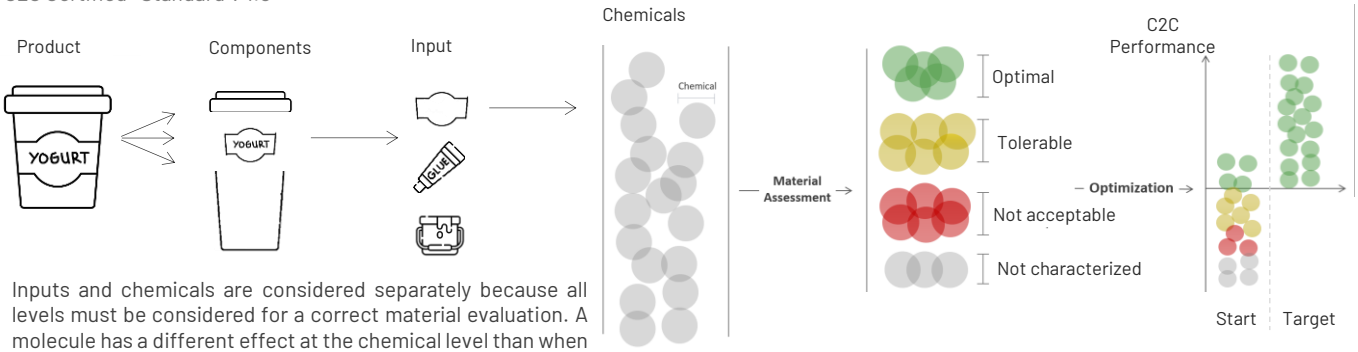
Circularity Index summarizes performance in Material Health (MH), Sourcing and Recoverability:
Circularity Index = (MH Inputs + MH Chemicals + Sourcing + Recoverability) / 4
MH Optimal: a / b rated according to C2C Certified® Standard V4.0
MH Tolerable: c rated according to C2C Certified® Standard V4.0
MH Not acceptable: x rated according to C2C Certified® Standard V4.0
MH not characterized: insufficient data for rating

_ CRADLE TO CRADLE METRICS EXPLANATION

Material Health of Inputs and Chemicals

Explanation based on an example yogurt cup

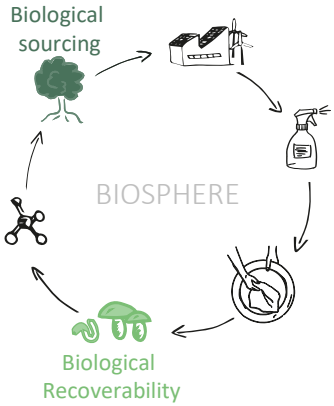
C2C Certified® Standard V4.0



Inputs and chemicals are considered separately because all levels must be considered for a correct material evaluation. A molecule has a different effect at the chemical level than when bound at the input level.

Sourcing and Recoverability

C2C Certified® Standard V4.0



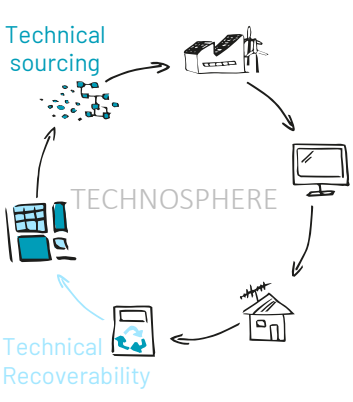
Biological sourcing

A source is responsibly harvested if:

- The harvest rate doesn't exceed the regrowth rate in the long term
- The health, productive function and biodiversity of the forest/vegetation and the protective systems (soil and water) are maintained or ideally improved

Biological Recoverability

After the use-phase, the material undergoes biological decomposition. It thereby efficiently returns nutrients from the material back to the earth.



Technical sourcing

Secondary technical material has a defined post-consumer recycled content.

Technical Recoverability

After disassembly, the "Materials Intended for Recycling" are separated. They can be differentiated into:

- Recycling: Material quality remains the same or improves
- Downcycling: The material quality decreases.

_RENEWABLE ENERGY

Share of renewable energy in final manufacturing facility (acc. to C2C Certified® Standard V4 definition).

_ CARBON FOOTPRINT

For calculation of the Carbon Footprint, Scope 1 and 2 emissions were considered (acc. to C2C Certified® Standard V4 definition). The following project was used for CO_2 compensation: 400 MW Solar Power Project at Bhadla, Rajasthan (Gold Standard).