

Summary

KMC Life-Cycle Assessment

This Life-Cycle Assessment (LCA) evaluates the environmental footprint of producing 1 ton of granules (92% dry matter), and flakes (92% dry matter) at the KMC Granules facility. The study follows ISO 14040 and ISO 14044 standards and has been prepared by Nature Preserve and has been critically reviewed by The Footprint Firm. This study uses high-quality production data from 2024-2025.

The system boundary is cradle-to-gate and includes:

1. **Raw material procurement** – potatoes, chemicals, groundwater, and packaging
2. **Transportation** – delivery of raw materials to production site
3. **Production processes** – energy consumption and waste management

Key findings include the calculated total climate footprint in accordance with the EF3.1 LCIA method (incl. fossil and biogenic greenhouse gas emissions as well as emissions from land use and land use change). The results are calculated per ton of product (as-is-basis).

Table 1 – The calculated climate footprint of flakes and granules

Product	Climate change impact (kgCO2eq/ton d.m.*)
Granules	1101
Flakes	1284

*dry matter

Potato cultivation and natural gas for heating are the largest contributors to the climate footprint. Transitioning to renewable energy sources significantly reduces emissions.

This summary focuses on the climate footprint of the products, but the LCA study also assesses other environmental impacts included in the EF3.1 LCIA method. Hence, the LCA study provides a comprehensive baseline for understanding and reducing the environmental impacts of KMC's products.