

GME - Gelatine Manufacturers of Europe - Members

WATER FOOTPRINT OF GELATINE AND COLLAGEN PEPTIDES

As part of our commitment to sustainable development, the Gelatine Manufacturers Europe (GME) initiated a project to gain insight in the development of the carbon footprint of gelatine and collagen peptides produced by the GME members. The project is currently covering the years 2006 to 2024 and results are available in a separate statement.

To enlarge the insight, GME decided in 2016 to include a water footprint project covering the same period.

Scope:

The assessment was made with the cooperation of all GME members and includes all different types of raw materials and all types of processing.

To get clear understanding on the water footprint of the gelatine production process, the water depletion (Recipe 2016 method) and Available WAtter REmaining (AWARE) method have been assessed.

Methodology and background data:

The impact of water from gelatine and collagen peptides production is calculated in a similar way as the carbon footprint: using economic allocation to distribute the impact of water use to the different co-products (based on 2022-2024 average prices).

For this, the framework used for the GME carbon footprint project was adopted to use the water use impact category (Recipe 2016 method) and Available Water REmaining (AWARE) method instead of the CO₂ impact factors. All the same system boundaries and methodological assumptions apply.

Cradle-to-gate and gate-to-gate principle:

Since the upstream water consumption, related to the supply chain of raw material, is out of the span of control of the GME members, assessment was done excluding the supply chain for the raw materials: gate-to-gate principle.

Results (gate-to-gate principle):

Water Footprint:

The results show that between 2006 and 2024, the water (depletion) footprint, excluding the supply chain of raw material, has been reduced by 21,5 %.



Figure 1: Change in water depletion for gelatine and collagen peptides using ReCiPe. Weighted average per kg of gelatine and collagen peptides, excluding raw materials (supply chain), between 2006 and 2024 (relative to the total value of 2006 = 100); economic allocation based on 2022-2024 average prices.

This year we observe a decrease of 2,4% in the water depletion impact with respect to the previous year 2023 (excluding the raw material supply chain). The improvement is mainly due to a decrease in on-site water usage.

Changes over the years are resulting from changes in energy mix, market and/or product portfolio.

Validation period: until 31 December 2026.

