

Applicant: Solar Foods Oy, Laserkatu 6, FI-53850 Lappeenranta, Finland.

The novel food, which is subject to the present novel food application, and has been submitted in accordance with Regulation (EU) 2015/2283, is a microbial protein-rich powder comprised of biomass of inactivated bacterial cells of a non-genetically modified strain of *Xanthobacter* sp.

The production of the novel food is based on the cultivation of *Xanthobacter* sp. SoF1 in a continuous bioprocess. It is well characterized and carefully monitored. Quality assurance programs have been established to ensure the product meets HACCP (Hazard Analysis and Critical Control Points) principles and release specifications.

The composition of the novel food has been characterized and product specifications have been established. Detailed physical, chemical, and microbiological product analysis, as well as stability tests show the safety and long-term stability of the novel food.

The novel food is intended to be used as an ingredient in different food groups. The novel food is not intended to replace another food but may partially replace the consumption of meat in the non-vegetarian population and the consumption of meat imitates in the vegetarian population.

No safety concerns were raised from the compositional data, growth medium, manufacturing process, and allergenicity data. The strain of *Xanthobacter* used to produce this novel food has been fully characterized and does not raise any safety concerns. These data are considered sufficient to support the absence of toxic potential of the novel food. Furthermore, the following battery of in vitro genotoxicity studies were conducted, OECD 471, OECD 487, and OECD 473, which showed that the product is not genotoxic and supports the safety of the ingredient.

Based on the evidence presented, the microbial protein-rich powder as a novel food is safe for human consumption.