

**Summary of the dossier:** Beet leaf protein (*Beta vulgaris* L.).

**Applicant:** Cosun Beet Company, Noordzeedijk 113, 4671 TL Dinteloord, The Netherlands

This novel food dossier contains the application for the novel food status of beet leaf protein from *Beta vulgaris* L. subsp. *vulgaris* var. *altissima*, needed for authorized use in the EU ingredient market according to the Regulation (EU) No 2015/2283. Beet leaf protein falls under the novel food class 'Food consisting of, isolated from, or produced from plants or their parts' as set in Article 3(2)(a)(iv) of Regulation (EU) 2015/2283.

The novel food beet leaf protein is a protein powder obtained from leaves of *Beta vulgaris* L. by extraction and filtration. The source has a history of use. Beet leaf protein contains mainly proteins (RuBisCo) and carbohydrates. The processing is performed according to HACCP standards and complies with the general food safety principles, food contaminants and microbiological requirements laid in EU legislation.

Beet leaf protein is targeted towards the general, healthy population. It will be used as a plant-based alternative to animal-based food ingredients, in various products from different food categories including meat and dairy substitutes, bakery products, spreads and margarines, sauces and dressings, fries and snacks, egg and gelatin replacement, and candy and chocolate products. The maximum anticipated intake is considered low (max. 8.5 g/day for high consumers).

Analyses show no safety concerns for heavy metals, mycotoxins, dioxins, PCBs, pesticides, antinutritional factors and microorganisms in beet leaf protein. Concentrations of undesirable substances are low and no plant-specific components of concern to human health were identified. Studies on beet leaf extracts in rodents describe no adverse effects. Considering the proposed conditions of use and low anticipated intake levels, the extensive history of use of the source and the low concentrations of undesired substances, no further toxicity studies were performed.

The allergenic potential of the novel food is considered low since the major protein is RuBisCo which is considered non-allergenic. Sulphite is present in beet leaf protein which has to be labelled on consumer labels when concentrations are above 10 ppm in the end product. Other labelling of allergens is not required.