



Safety evaluation of the food enzyme containing endo-1,3(4)- β -glucanase, endo-1,4- β -xylanase and cellulase activities from the non-genetically modified *Rasamsonia emersonii* strain FGB

1 Report

Status Finished

EFSA question number [EFSA-Q-2021-00646](#)

Adopted 19-05-2026

Previous authorisations The applicant has submitted a dossier in support of the application for authorisation of the food enzyme containing endo-1,3(4)- β -glucanase, endo-1,4- β -xylanase and cellulase from *R. emersonii* (strain FGB). Additional information, requested from the applicant during the assessment phase on 26 January 2022, 30 June 2022 and 6 February 2026, was received on 26 April 2022, 31 August 2022 and 26 February 2026, respectively

2 Production method

Manufacturing The production strain is grown as a pure culture using a typical industrial medium in a submerged, fed-batch fermentation system with conventional process controls in place.

Formulation Unknown

Downstream processing After completion of the fermentation, the solid biomass is removed from the fermentation broth by filtration. The filtrate containing the enzyme is then further purified and concentrated, including an ultrafiltration step in which enzyme protein is retained, while most of the low molecular mass material passes the filtration membrane and is discarded.

Average TOS (w/w) 21.8 %

Average activity/TOS 2313.0 BGF/mg TOS



3 EFSA tested impurities



Production strain and recombinant DNA The absence of viable cells of the production strain in the food enzyme was demonstrated

Allergenicity In conclusion, the Panel considered that under the intended conditions of use, a risk of allergic reactions upon dietary exposure to this food enzyme cannot be excluded, but that the likelihood is low

Antimicrobial resistance No antimicrobial activity was detected in any of the tested batches.

Antifoam agents /

Other The presence of secalonic acid was examined in the three food enzyme batches intended for commercialisation and was below the limit of quantification (LoQ) of the applied analytical method

Pathogens

Microbiological quality indicators

Metals

Comments LoD: Pb = 1.0 and 0.6 mg/kg depending on the amount of sample. LoQ: secalonic acid D = 0.1 µg/mL.