

Safety evaluation of a food enzyme containing arabinan endo-1,5- α -l-arabinanase and endo-polygalacturonase activities from the non-genetically modified *Aspergillus tubingensis* strain PX22-272

1 Report

Status Finished

EFSA question number [EFSA-Q-2023-00270](#)

Adopted 25-06-2026

Previous authorisations The applicant has submitted a dossier in support of the application for authorisation of the food enzyme containing arabinan endo-1,5- α -l-arabinanase and endo-polygalacturonase from a non-genetically modified *Aspergillus tubingensis* PX22-272. Additional information, requested from the applicant during the assessment process on 20 December 2023 and 11 February 2026, was received on 20 March 2024 and 28 April 2026, respectively.

2 Production method

Manufacturing The production strain is grown as a pure culture using a typical industrial medium in a [...] fermentation system with conventional process controls in place.

Formulation Unknown

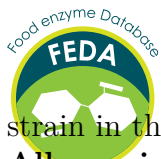
Downstream processing After completion of the fermentation, the enzyme is extracted with and the solid biomass is removed from the suspension by centrifugation. The supernatant containing the enzyme is then further purified and concentrated, including an ultrafiltration step in which enzyme protein is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

Average TOS (w/w) 18.6 %

Average activity/TOS 1.4 U/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, particularly in papaya-and pollen-allergic individuals, cannot be excluded. The likelihood of papaya-related reactions will not exceed the risk of reactions after papaya consumption.

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

Antifoam agents /

Other The presence of aflatoxins (B1, B2, G1, G2), ochratoxin A, sterigmatocystin, T-2 toxin, zearalenone and fumonisins (B1, B2) was examined in all batches and was below the LoQ of the applied methods.

Pathogens

Microbiological quality indicators

Metals

Comments LoQs: Pb = 0.05 and 5 mg/kg depending on the batch tested; As = 0.1 and 3 mg/kg depending on the batch tested. LoQs: aflatoxins (B1, B2, G1, G2), ochratoxin A = 0.5 µg/kg each; fumonisins (B1, B2) = 0.5 mg/kg; sterigmatocystin, zearalenone = 100 µg/kg each; T-2 toxin = 0.1 mg/kg.