Safety evaluation of the food enzyme arabinan endo-1,5-α-l-arabinanase from the non-genetically modified Aspergillus tubingensis strain GPA41

1 Report

Status Finished
EFSA question number EFSA-Q-2023-00243
Adopted 14-04-2026
Previous authorisations The applicant has submitted a dossier in support of the application for authorisation of the food enzyme arabinan endo-1,5-α-l-arabinanase from a non-genetically modified A. tubingensis GPA41. Additional information was requested from the applicant during the assessment process on 7 Febraury 2024 and and 7 April 2026 and received on 7 May 2024 and 7 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 then the solid biomass is removed from the fermentation broth 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) 15.4 %
Average activity/TOS 4.8 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 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 /
Pathogens
Microbiological quality indicators
Metals
Coments LoQs: Pb = 0.05 mg/kg; As = 0.1 mg/kg. LoQs: aflatoxins (B1, B2, G1, G2); ochratoxin A = 0.5 µg/kg each; fumonisins (B1, B2) = 0.5 mg/kg each; sterigmatocystin, zearalenone = 100 µg/kg each; T-2 toxin = 0.1 mg/kg.