Safety evaluation of the food enzyme arabinan endo-1,5-α-L-arabinanase from the non-genetically modified Aspergillus aculeatinus strain CBS 148915

1 Report

Status Finished
EFSA question number EFSA-Q-2023-00241
Adopted 12-09-2025
Previous authorisations The applicant has submitted a dossier in support of the application for authorisation of the food enzyme arabanase from the non-genetically modified Aspergillus aculeatinus strain CBS 148915. The data package was submitted on 31 March 2023. Additional information, requested from the applicant during the assessment phase on 25 March 2024, was received on 25 June 2024

2 Production method

Manufacturing The production strain is grown as a pure culture using a typical industrial medium in [. . .] with conventional process controls in place.
Formulation Unknown
Downstream processing After completion of the fermentation, the enzyme is [...] and [...] containing the enzyme is then further purified and concentrated, including [...] 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) 5.1 %
Average activity/TOS 8.3 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 when used for the production of distilled alcohols, the Panel considered that a risk of allergic reactions upon dietary exposure can be excluded. For the remaining

intended uses, the risk of allergic reactions upon dietary exposure to this food enzyme cannot be excluded, but the likelihood is low

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

Antifoam agents /

Other The presence of aflatoxins B1, B2, G1 and G2, fumonisins B1 and B2, ochratoxin A, HT2 toxin, T-2 toxin, zearalenone and deoxynivalenol (DON) was examined in three food enzyme batches and was below the LoQ of the applied methods.

Pathogens

Microbiological quality indicators

Metals

Coments LoQs: Pb, As = 0.01 mg/kg each; Hg = 0.005 mg/kg; Cd = 0.009 mg/kg. LoQs: aflatoxin B1, B2, G1, G2 = 0.1 µg/kg each; fumonisin B1, B2 = 250 µg/kg each; ochratoxin A = 2.5 µg/kg; HT2 toxin, T-2 toxin = 10 µg/kg each; zearalenone = 6 µg/kg; deoxynivalenol (DON) = 125 µg/kg.