

# Safety evaluation of the food enzyme endo-1,4- $\beta$ -xylanase from the genetically modified Trichoderma reesei strain Dp-Nzd66

## 1 Report

**Status** Finished

**EFSA question number** [EFSA-Q-2023-00653](#)

**Adopted** 11-03-2026

**Previous authorisations** The applicant has submitted a dossier in support of the application for authorisation of the food enzyme endo-1,4- $\beta$ -xylanase from Trichoderma reesei strain DP-Nzd66. Additional information were requested during the risk assessment phase.

## 2 Production method

**Manufacturing** The production strain is grown as a pure culture using a typical industrial medium in a submerged, batch or 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 the enzyme protein is retained, while most of the low molecular mass material passes the membrane and is discarded

**Average TOS (w/w)** 12.3 %

**Average activity/TOS** 9999.0 GPU/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. The absence of recombinant DNA 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** The presence of aflatoxins (B1, B2, G1 and G2), fumonisin (B1 and B2), ochratoxin A, sterigmatocystin, T-2 toxin and zearalenone was examined in all food enzyme batches and all were below the limit of detection (LoD) of the applied methods

**Pathogens**

**Microbiological quality indicators**

**Metals**

**Comments** LoD: Pb = 0.01 mg/kg. LoDs: aflatoxins (total = 2 µg/kg; fumonisins (total) = 0.2 mg/kg; ochratoxin A = 2 µg/kg; sterigmatocystin = 10 µg/kg; T-2 toxin = 10 µg/kg; zearalenone = 5 µg/kg)