

Amendments of standards and specifications of Alkaline protease

Ministry of Agriculture, Forestry and Fisheries (MAFF) will add standards and specifications to the ministerial ordinance.

Major additions are as follows.

Alkaline protease No.3

Specifications for method of manufacture in general

Alkaline protease of the following specification is allowed to be used as feed additives for broilers and layers only.

Specifications for feed additives

Active Substance

Compositional specifications

Unit ≥ 200000 protein digestion/1g

Physical and chemical properties

- (1) It comes in light to dark brown liquid and has a characteristic odor.
- (2) pH of aqueous solution or aqueous suspension (1 part solute/100 parts solution) is 4.0 to 7.0.
- (3) It has the best enzyme activity when pH is between 9.0 and 11.0.

Ignition residue $\leq 5.0\%$ (1g)

Standard for method of manufacture

Genetically modified *Bacillus licheniformis* should be cultured. The cultured solution should be filtered or be extracted with water. The bacteria has to be removed and the filtrate must be concentrated.

Standard for method of storage

The products must be stored in light-shielding and airtight containers.

Product No. 1

Compositional specifications

This product comes in the form of pieces, powder, or particles and is produced by adding sodium sulfate and sucrose as necessary and mixing excipient substance to the Active Substance of Alkaline protease No.3.

Unit This product contains the amount of Alkaline protease corresponding to 85 to 170% of the protein digestion unit of activity shown on the label.

Standard for method of storage

Same as the standard for method of Active Substance of Alkaline protease No.3.

Product No. 2

Compositional specifications

This product comes in the form of liquid and is produced by adding sodium benzoate and potassium sorbate as necessary and adding sorbitol and glycerin to the Active Substance of Alkaline protease No.3.

Unit This product contains the amount of Alkaline protease corresponding to 85 to 170% of the protein digestion unit of activity shown on the label.

Standard for method of storage

Same as the standard for method of Active Substance of Alkaline protease No.3.