

ANNEX

| Identification number of the feed additive | Name of the holder of authorisation | Additive | Composition, chemical formula, description, analytical method | Species or category of animal | Maximum age | Minimum content | Maximum content | Other provisions | End of period of authorisation |
|--|-------------------------------------|---|---|-------------------------------|-------------|---|-----------------|---|---|
| | | | | | | Units of activity/kg of complete feedingstuff with a moisture content of 12 % | | | |
| Category: zootechnical additives. Functional group: digestibility enhancers. | | | | | | | | | |
| 4a14 | AVEVE BV | Endo-1,4-beta-xylanase (EC 3.2.1.8) Endo-1,3(4)-beta-glucanase (EC 3.2.1.6) Polygalacturonase (EC 3.2.1.15) | Additive composition Preparation of endo-1,4-beta-xylanase produced with <i>Trichoderma reesei</i> MULC 49755, endo-1,3(4)-beta-glucanase produced with <i>Trichoderma reesei</i> MULC 49754 and polygalacturonase produced with <i>Aspergillus fijiensis</i> CBS 589.94 having a minimum activity of: solid form: Endo-1,4-beta-xylanase: 21 400 XU ⁽¹⁾ /g Endo-1,3(4)-beta-glucanase: 12 300 BGU ⁽²⁾ /g Polygalacturonase: 460 PGLU ⁽³⁾ /g. liquid form: Endo-1,4-beta-xylanase: 10 700 XU/g Endo-1,3(4)-beta-glucanase: 6 150 BGU/g Polygalacturonase: 230 PGLU/g. Characterisation of the active substance endo-1,4-beta-xylanase (EC 3.2.1.8) produced with <i>Trichoderma reesei</i> MULC 49755, endo-1,3(4)-beta-glucanase (EC | Piglets (weaned and suckling) | - | 2 140 XU 1 230 BGU 46 PGLU | - | 1. In the directions for use of the additive and premixtures, the storage conditions and stability to heat treatment shall be indicated. 2. For users of the additive and premixtures, feed business operators shall establish operational procedures and organisational measures to address the potential risks resulting from their use. Where those risks cannot be eliminated by such procedures and measures, the additive and premixtures shall be used with personal breathing and skin protective equipment. | [10 years from the date of entry into force of this Regulation. To be completed by the Service responsible for the publication] |

⁽¹⁾ 1 XU is the amount of enzyme which releases 1 µmol of reducing sugar per minute from xylan of oat spelt at pH 4,8 and 50°C.⁽²⁾ 1 BGU is the amount of enzyme which releases 1 µmol of reducing sugar per minute from β-glucan of barley at pH 5,0 and 50°C.⁽³⁾ 1 PGLU is the amount of enzyme which releases 1 µmol of reducing sugar per minute from polymethyl galacturonic acid (low methylation degree) at pH 4,8 and 35°C.

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| | | | <p>3.2.1.6) produced with <i>Trichoderma reesei</i> MULC 49754 and polygalacturonase (EC 3.2.1.15) produced with <i>Aspergillus fijiensis</i> CBS 589.94</p> <p>Analytical method ⁽⁴⁾</p> <p>For the determination of endo-1,4-beta-xylanase in the feed additive and premixtures:</p> <ul style="list-style-type: none"> - colorimetric (DNS) method based on the enzymatic hydrolysis of the oat spelt xylan substrate <p>For the determination of endo-1,4-beta-xylanase in compound feed:</p> <ul style="list-style-type: none"> - colorimetric method based the enzymatic reaction of endo-1,4-beta-xylanase on the azurine cross-linked wheat arabinoxylan substrate <p>For the determination of endo-1,3(4)-beta-glucanase in the feed additive and premixtures:</p> <ul style="list-style-type: none"> - colorimetric (DNS) method based on the enzymatic hydrolysis of the barley beta-glucan substrate <p>For the determination of endo-1,3(4)-beta-glucanase in compound feed:</p> <ul style="list-style-type: none"> - colorimetric method based the enzymatic reaction of endo-1,3(4)-beta-glucanase on the azo barley glucan substrate <p>For the determination of polygalacturonase in the feed additive and premixtures:</p> <ul style="list-style-type: none"> - colorimetric (DNS) method based on the enzymatic hydrolysis of the pectin | | | | | | |
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⁽⁴⁾ Details of the analytical methods are available at the following address of the Reference Laboratory: https://joint-research-centre.ec.europa.eu/eurl-fa-eurl-feed-additives/eurl-fa-authorisation/eurl-fa-evaluation-reports_en.

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| | | | substrate For the determination of polygalacturonase in compound feed: - viscosimetric method based on decrease in viscosity produced by action of polygalacturase on the pectin substrate | | | | | | |
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