

Commission Regulation (EC) No 2188/2002 of 9 December  
2002 concerning the provisional authorisation of new uses  
of additives in feedingstuffs (Text with EEA relevance)

COMMISSION REGULATION (EC) No 2188/2002

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concerning the provisional authorisation of new uses of additives in feedingstuffs

(Text with EEA relevance)

*Article 1*

The preparations belonging to the group 'Enzymes' listed in Annexes I and II to this Regulation are authorised for use as additives in animal nutrition under the conditions laid down in these Annexes.

*Article 2*

The preparation belonging to the group 'Enzymes' listed in Annex III to this Regulation is authorised for use as additive in animal nutrition under the conditions laid down in this Annex.

*Article 3*

This Regulation shall enter into force on the day following that of its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EC) No 2188/2002. (See end of Document for details)

## ANNEX I

No (or EC No)	Additive	Chemical formula, or description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorization
					Units of activity/kg of complete feedingstuff			
Enzymes								
11	Endo-1,4-beta-glucanase	Preparation of endo-1,4-beta-glucanase, EC 3.2.1.4	Laying hens	[ <sup>F1</sup> —]	[ <sup>F1</sup> Endo-1,4-beta-glucanase:]	[ <sup>F1</sup> —]	1. 2. 3.	[ <sup>F1</sup> 1.1.2007] .....
	Endo-1,3(4)-beta-glucanase	endo-1,3(4)-beta-glucanase, EC 3.2.1.6			[ <sup>F1</sup> Endo-1,3(4)-beta-glucanase:]	[ <sup>F1</sup> (4)-]		
	Endo-1,4-beta-xylanase	xylanase produced by <i>Trichoderma longibrachium</i> (ATCC 74252) having a minimum activity of:			[ <sup>F1</sup> Endo-1,4-beta-xylanase:]	[ <sup>F1</sup> —]		
			Piglets	—	Endo-1,4-beta-glucanase: 400 U	—	1.	In 1.2007 the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. Recommended dosages per
					Endo-1,3(4)-beta-glucanase: 900 U			
					Endo-1,4-beta-xylanase: 800 U/g or ml			
			Granular and liquid form:					
				Endo-1,4-beta-glucanase:				
				Endo-1,3(4)-beta-glucanase:			2.	

a 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from carboxymethylcellulose per minute at pH 5,0 and 40 °C.

b 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from barley beta-glucan per minute at pH 5,0 and 40 °C.

c 1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from oat spelt xylan per minute at pH 5,0 and 40 °C.

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				<p>18 000 U<sup>a</sup>/ g or ml</p> <p>Endo-1,4- beta- xylanase:</p> <p>26 000 U<sup>b</sup>/ g or ml</p>			<p>3.</p> <p>kilogram of complete feedingstuff:</p> <p>endo-1,4- beta- glucanase: 400-1 600 U</p> <p>endo-1,3(4)- beta- glucanase: 900-3 600 U</p> <p>endo-1, 4- beta- xylanase: 1 300- 5 200 U.</p> <p>For use in compound feed rich in non- starch polysaccharides (mainly arabinoxylans and beta- glucans), e.g. containing more than 40 % wheat, triticale</p>
<b>a</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from carboxymethylcellulose per minute at pH 5,0 and 40 °C.						
<b>b</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from barley beta-glucan per minute at pH 5,0 and 40 °C.						
<b>c</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from oat spelt xylan per minute at pH 5,0 and 40 °C.						

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							or maize or wheat and 20 % rye.
<b>a</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from carboxymethylcellulose per minute at pH 5,0 and 40 °C.						
<b>b</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from barley beta-glucan per minute at pH 5,0 and 40 °C.						
<b>c</b>	1 U is the amount of enzyme which liberates 0,1 micromoles of glucose from oat spelt xylan per minute at pH 5,0 and 40 °C.						

### Textual Amendments

- F1** Deleted by Commission Implementing Regulation (EU) 2017/1145 of 8 June 2017 on the withdrawal from the market of certain feed additives authorised pursuant to Council Directives 70/524/EEC and 82/471/EEC and repealing the obsolete provisions authorising those feed additives (Text with EEA relevance).

## ANNEX II

No (or EC No)	Additive	Chemical formula, or description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorization
					Units of activity/kg of complete feedingstuff			
Enzymes								
51	Endo-1,4-beta-xylanase	Preparation of endo-1,4-beta-xylanase produced by <i>Bacillus subtilis</i> (LMG S-15136) having a minimum activity of:	Turkeys for fattening	—	10 IU	—	1.	1.1.2007 In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and
<b>a</b>	1 IU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 4,5 and 30 °C.							

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				Solid and liquid:				stability to pelleting.
					100 IU <sup>a</sup> /g or ml		2.	Recommended dosages per kilogram of complete feedingstuff: 10 IU.
							3.	For use in compound feed rich in arabinoxylan, e.g. containing minimum 40 % wheat or barley.

**a** 1 IU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 4,5 and 30 °C.

ANNEX III

No (or EC No)	Additive	Chemical formula, or description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorization
					Units of activity/kg of complete feedingstuff			
Enzymes								
51	Endo-1,4-beta-xylanase:	Preparation of endo-1,4-beta-xylanase produced by	Chickens for fattening	—	10 IU	—	1.	1.1.2007 In the directions for use of the additive

**a** 1 IU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 4,5 and 3 °C.

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	<i>Bacillus subtilis</i> (LMG S-15136) having a minimum activity of:	Endo-1,4-beta-xylanase:	Liquid:	100 IU <sup>a</sup> /ml		and premixture, indicate the storage temperature, storage life, and stability to pelleting.
					2.	Recommended dosages per kilogram of complete feedingstuff: 10 IU.
					3.	For use in compound feed rich in arabinoxylan, e.g. containing minimum 40 % wheat or barley.
<b>a</b>	1 IU is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 4,5 and 3 °C.					

**Changes to legislation:**

There are currently no known outstanding effects for the Commission Regulation (EC) No 2188/2002.