32	Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) having a minimum activity of: Endo-1,3(4)-beta-glucanase : 200 U[60]/ml	Chickens for fattening	-	endo-1,3(4)-beta-glucanase : 100 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 100 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 30% barley.	30.06.2004[h]
		Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) having a minimum activity of: Endo-1,3(4)-beta-glucanase : 1 200 U[61]/ml	Piglets	4 months	endo-1,3(4)-beta-glucanase : 400 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 400 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta -glucans), e.g. containing more than 55% barley.	30.06.2004[h]
			Pigs for fattening	-	endo-1,3(4)-beta-glucanase : 500 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 500 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans), e.g. containing more than 70% barley.	30.06.2004[h]

[60] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[61] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

33	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Powder form: Endo-1,4-beta-xylanase : 2 000 U [62]/g Liquid form: Endo-1,4-beta-xylanase : 5 000 U/ ml	Chickens for fattening	-	endo-1,4-beta-xylanase : 500 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase : 500-2 500 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 55% wheat or 60% rye.	30.06.2004[h]
			Laying hens	-	endo-1,4-beta-xylanase : 2 000 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 2 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 35% wheat.	30.06.2004[h]
		Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Powder form: Endo-1,4-beta-xylanase : 4 000 U[63]/g Liquid form: Endo-1,4-beta-xylanase : 10 000 U/ml	Piglets	4 months	endo-1,4-beta-xylanase : 5 000 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase : 5 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 45% wheat.	30.06.2004[h]

[62] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50° C
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[63] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50° C
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

		Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Powder form: Endo-1,4-beta-xylanase : 4 000 U[64]/g Liquid form: Endo-1,4-beta-xylanase : 8 000 U/ml	Pigs for fattening	-	endo-1,4-beta-xylanase : 4 000 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase : 4 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 35% wheat.	30.06.2004[h]
34	Endo-1,3 (4) -beta-glucanase EC 3.2.1.6 Endo-1,4 -beta-xylanase EC 3.2.1.8 Alpha –amylase EC 3.2.1.1	Preparation of endo-1,3 (4) –beta-glucanase and endo 1,4 –beta-xylanase produced by *Aspergillus niger* (NRRL 25541) and of alpha –amylase produced by *Aspergillus oryzae* (ATCC 66222) having a minimum activity of: Endo-1,3 (4)–beta-glucanase: 275 U[65]/g Endo-1,4 –beta-xylanase: 400 U[66]/g Alpha-amylase: 3 100 U[67]/g	Piglets	4 months	endo-1, 3 (4) – beta-glucanase: 165 U endo-1,4 –beta-xylanase: 240 U alpha –amylase: 1 860 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and the stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1, 3 (4) –beta-glucanase: 165 U endo-1,4 –beta-xylanase: 240 U alpha–amylase: 1 860 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 45% barley and 10% wheat or 10% maize.	26.07.2004[j]

[64] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50° C

[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

[65] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugar (glucose equivalent) from oat beta-glucan per minute at pH 4.0 and 30°C.

[66] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugar (glucose equivalent) from oat xylan per minute at pH 4.0 and 30°C.

[67] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugar (glucose equivalent) from wheat starch per minute at pH 4.0 and 30°C.

[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

35	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta- xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 80 U[68]/g Endo-1,4-beta-xylanase: 180 U[69]/g	Laying hens	-	endo-1,3(4)-beta-glucanase: 80 U endo-1,4-beta-xylanase: 180 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 80 U endo-1,4-beta-xylanase: 180 U. 3. For use in compound feed rich in non-starch polysaccharides, (mainly beta-glucans and arabinoxylans), e.g. containing more than 60% barley.	26.07.2004[j]
36	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta- xylanase produced by *Trichoderma longibrachiatum IMI SD 1*35) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 300 U[70]/g Endo-1,4-beta-xylanase: 300 U[71]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U. 3. For use in compound feed rich in non-starch polysaccharides, (mainly beta-glucans and arabinoxylans), e.g. containing more than 40% barley.	26.07.2004[j]

[68] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[69] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)
[70] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[71] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

			Laying hens	-	endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 300 U endo-1,4-beta-xylanase: 300 U. 3. For use in compound feed rich in non-starch polysaccharides, (mainly beta-glucans and arabinoxylans), e.g. containing more than 35% barley.	26.07.2004[j]
37	Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107), with a minimum activity of: Endo-1,4-beta-xylanase : 2 500 U[72]/g Subtilisin : 800 U[73]/g:	Chickens for fattening	-	endo-1,4-beta-xylanase: 500 U subtilisin: 160 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 500-2 500 U subtilisin: 160-800 U. 3. For use in compound feed e.g. containing more than 65% wheat.	26.07.2004[j]

[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

[72] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C

[73] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7.5 and 40°C

[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

			Turkeys	-	endo-1,4-beta-xylanase: 825 U subtilisin: 265 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 825-2 500 U subtilisin: 265-800 U. 3. For use in compound feed e.g. containing more than 45% wheat.	26.07.2004[j]
38	Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: Endo-1,4-beta-xylanase: 5 000 U[74]/g Subtilisin: 500 U[75]/g	Piglets	4 months	endo-1,4-beta-xylanase: 5 000 U subtilisin: 500 U	- -	1.In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2.Recommended dose per kg of complete feedingstuff: endo-1,4-beta- xylanase: 5 000 U subtilisin: 500 U. 3. For use in compound feed e.g. containing more than 40% wheat.	26.07.2004[j]

[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

[74] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.

[75] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7.5 and 40°C.

[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

39	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 400 U[76]/g Endo-1,4-beta-xylanase: 400 U[77]/g	Pigs for fattening	-	endo-1,3(4)-beta-glucanase: 400 U endo-1,4-beta-xylanase: 400 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 400 U endo-1,4-beta-xylanase: 400 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans) e.g. containing more than 65% barley.	26.07.2004[j]
40	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta- xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 100 U[78]/g Endo-1,4-beta-xylanase: 300 U[79]/g Subtilisin: 800 U[80]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 30 U endo-1,4-beta-xylanase: 90 U subtilisin: 240 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)- beta-glucanase: 30-100 U endo-1,4-beta-xylanase: 90-300 U subtilisin: 240-800 U. 3. For use in compound feed e.g. containing more than 60% barley.	26.07.2004[j]

[76] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[77] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)
[78] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[79] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[80] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7.5 and 40°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

41	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Subtilisin EC 3.4.21.62	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta- xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and subtilisin produced by *Bacillus subtilis* (ATCC 2107) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 100 U[81]/g Endo-1,4-beta-xylanase: 2 500 U[82]/g Subtilisin: 800 U[83]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 25 U endo-1,4-beta-xylanase: 625 U subtilisin: 200 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 25-100 U endo-1,4-beta-xylanase: 625-2 500 U subtilisin: 200-800 U. 3. For use in compound feed e.g. containing more than 30% wheat and 10% barley.	26.07.2004[j]
			Laying hens	-	endo-1,3(4)-beta-glucanase: 100 U endo-1,4-beta-xylanase: 2500 U subtilisin: 800 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 100 U endo-1,4-beta-xylanase: 2500 U subtilisin: 800 U. 3. For use in compound feed e.g. containing more than 50% wheat and 25% barley.	26.07.2004[j]

[81] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[82] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[83] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7.5 and 40°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

42	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) having a minimum activity of: Solid form: Endo-1,4-beta-xylanase : 4 000 U[84]/g Characteristics of the authorised preparation: Endo-1,4-beta-xylanase: 1,99 % Wheat: 97,7 % Calcium propionate: 0,3 % Lecithin: 0,01%	Piglets	4 months	endo-1,4-beta-xylanase : 4 000 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase : 4 000 U. 3. For use in compound feed rich in non-starch polysaccharides, (mainly arabinoxylans), e.g. containing more than 60% wheat.	26.07.2004[j]
			Pigs for fattening	-	endo-1,4-beta-xylanase : 4000 U	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 4000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 60 % wheat.	17.07.2004[m]

[84] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

43	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Alpha-amylase EC 3.2.1.1	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135), endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) having a minimum activity of: Endo-1,4-beta-xylanase: 3975 U[85]/g Endo-1,3(4)-beta-glucanase: 125 U[86]/g Alpha-amylase: 1000 U[87]/g	Piglets	4 months	endo-1,4-beta-xylanase: 3 975 U endo-1,3(4)-beta-glucanase: 125 U alpha-amylase: 1000 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,4-beta-xylanase: 3 975 U endo-1,3(4)-beta-glucanase: 125 U alpha-amylase: 1 000 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30 % wheat and 20% barley and 20% rye.	06.01.2004[k]
44	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Alpha-amylase EC 3.2.1.1	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105) and alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 250 U[88]/g Endo-1,4-beta-xylanase: 400 U[89]/g Alpha-amylase: 1000 U[90]/g	Piglets	4 months	endo-1,3(4)-beta-glucanase: 250 U endo-1,4-beta-xylanase: 400 U alpha-amylase: 1000 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 250 U endo-1,4-beta-xylanase: 400 U alpha-amylase: 1000 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 50% barley.	06.01.2004[k]

[85] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[86] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[87] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from a water insoluble cross-linked starch polymer substrate per minute at pH 6.5 and 37°C.
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)
[88] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[89] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[90] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from a water insoluble cross-linked starch polymer substrate per minute at pH 6.5 and 37°C.
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)

45	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Alpha-amylase EC 3.2.1.1	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) and alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 250 U[91]/g Endo-1,4-beta-xylanase: 400 U[92]/g Alpha-amylase: 1000 U[93]/g	Piglets	4 months	endo-1,3(4)-beta-glucanase: 250 U endo-1,4-beta-xylanase: 400 U alpha-amylase: 1000 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 250 U endo-1,4-beta-xylanase: 400 U alpha-amylase: 1000 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 35% barley.	06.01.2004[k]
46	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Polygalacturonase EC 3.2.1.15	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) and endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135) and polygalacturonase produced by *Aspergillus aculeatus* (CBS 589.94) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 400 U[94]/g Endo-1,4-beta-xylanase: 400 U[95]/g Polygalacturonase: 50 U[96]/g	Pigs for fattening	-	endo-1,3(4)-beta-glucanase: 400 U endo-1,4-beta-xylanase: 400 U polygalacturonase: 50 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 400 U endo-1,4- beta-xylanase: 400 U polygalacturonase: 50 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40% barley.	06.01.2004[k]

[91] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[92] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[93] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from a water insoluble cross-linked starch polymer substrate per minute at pH 6.5 and 37°C.
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)
[94] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[95] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[96] 1 U is the amount of enzyme which liberates 1 micromole of reducing material (galacturonic acid equivalents) from a poly D-galacturonic substrate per minute at pH 5.0 and 40°C.
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)

47	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Alpha-amylase EC 3.2.1.1 Polygalacturonase EC 3.2.1.15	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553), polygalacturonase produced by *Aspergillus aculeatus* (CBS 589.94) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 150 U[97]/g Endo-1,4-beta-xylanase: 4000 U[98]/g Alpha-amylase: 1000 U[99]/g Polygalacturonase: 25 U[100]/g	Piglets	4 months	endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 4000 U alpha-amylase: 1000 U polygalactu-ronase: 25 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 4000 U alpha-amylase: 1000 U polygalacturonase: 25 U. 3. For use in compound feed containing cereals rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 20% barley and 35% wheat.	06.01.2004[k]

[97] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[98] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C.
[99] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from a water insoluble cross-linked starch polymer substrate per minute at pH 6.5 and 37°C.
[100] 1 U is the amount of enzyme which liberates 1 micromole of reducing material (galacturonic acid equivalents) from a poly D-galacturonic substrate per minute at pH 5.0 and 40°C.
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)

48	Alpha-amylase EC 3.2.1.1 Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of alpha-amylase and endo-1,3(4)-beta-glucanase produced by *Bacillus amyloliquefaciens* (DSM 9553) having a minimum activity of: Coated form: Alpha-amylase: 200 KNU[101]/g Endo-1,3(4)-beta-glucanase: 350 FBG[102]/g Liquid form: Alpha-amylase: 130 KNU/ ml Endo-1,3(4)-beta-glucanase: 225 FBG/ml	Chickens for fattening	-	10 KNU 17 FBG	40 KNU 70 FBG	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 20 KNU 35 FBG. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40% barley.	01.04.2004[1]
			Turkeys for fattening	-	40 KNU 70 FBG	80 KNU 140 FBG	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 40 KNU 70 FBG. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40% barley.	01.04.2004[1]

[101] 1 KNU is the amount of enzyme which liberates 672 micromoles of reducing sugars (glucose equivalent) from soluble starch per minute at pH 5.6 and 37°C.
[102] 1 FBG is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C.
[1] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)
[1] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)

49	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-xylanase EC 3.2.1.8 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28 Polygalacturonase EC 3.2.1.15	Preparation of endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106), endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (IMI SD 135), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553), bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) and polygalacturonase produced by *Aspergillus aculeatus* (CBS 589.94) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 150 U[103]/g Endo-1,4-beta-xylanase: 1500 U[104]/g Alpha-amylase: 500 U[105]/g Bacillolysin: 800 U[106]/g Polygalacturonase: 50 U[107]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 1500 U alpha-amylase: 500 U bacillolysin: 800 U polygalac-turonase: 50 U	- - - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 1500 U alpha-amylase: 500 U bacillolysin: 800 U polygalacturonase: 50 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30 % wheat.	17.07.2004[m]

[103] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C
[104] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[105] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 6.5 and 37°C
[106] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from casein substrate per minute at pH 7.5 and 40°C
[107] 1 U is the amount of enzyme which liberates 1 micromole of reducing material (galacturonic acid equivalents) from poly D-galacturonic substrate per minute at pH 5.0 and 40°C
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

			Laying hens	-	endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 1500 U alpha-amylase: 500 U bacillolysin: 800 U polygalac-turonase: 50 U	- - - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase: 150 U endo-1,4-beta-xylanase: 1500 U alpha-amylase: 500 U bacillolysin: 800 U polygalacturonase: 50 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 30 % wheat.	17.07.2004[m]

[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

50	6-phytase EC 3.1.3.26	Preparation of 6-phytase produced by *Aspergillus oryzae* (DSM 11857) having a minimum activity of: Coated form: 2500 FYT[108]/g Liquid form: 5000 FYT/g	Chickens for fattening	-	250 FYT	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 500- 1000 FYT. 3. For use in compound feed containing more than 0.25% phytin bound phosphorus.	17.07.2004[m]
			Laying hens	-	250 FYT	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 500- 1000 FYT. 3. For use in compound feed containing more than 0.25% phytin bound phosphorus.	17.07.2004[m]

[108] 1 FYT is the amount of enzyme which liberates 1 micromole of inorganic phosphate per minute from sodium phytate at pH 5.5 and 37°C
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

			Turkeys for fattening	-	250 FYT	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 500- 1000 FYT. 3. For use in compound feed containing more than 0.25% phytin bound phosphorus.	17.07.2004[m]
			Piglets	2 months	500 FYT	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 500- 1000 FYT. 3. For use in compound feed containing more than 0.25% phytin bound phosphorus.	17.07.2004[m]
			Pigs for fattening	-	500 FYT	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 500-1000 FYT. 3. For use in compound feed containing more than 0.25% phytin bound phosphorus.	17.07.2004[m]

[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

51	Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,4-beta-xylanase produced by *Bacillus subtilis* (LMG-S 15136) having a minimum activity of: 100 IU[109]/g	Chickens for fattening	-	10 IU	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: 10 IU. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans), e.g. containing more than 40 % wheat	17.07.2004[m]
			Piglets	2 months	10 IU	-	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: 10 IU. 3. For use in compound feed rich in arabinoxylan, e.g. containing more than 40 % wheat.	31.05.2005[r]

[109] 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
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)
[r] First authorisation Commission Regulation (EC) N°937/2001 (OJ L 130, 12.5.2001, p. 25)

52	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94) and alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) having a minimum activity of : Liquid form: Endo-1,3(4)-beta-glucanase : 10 000 U[110]/ml Endo-1,4-beta-glucanase : 120 000 U[111]/ml Alpha-amylase : 400 U[112]/ml	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 1 000 U endo-1,4-beta-glucanase: 12 000 U alpha-amylase: 40 U	- - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kg of complete feedingstuff: endo-1,3(4)-beta-glucanase : 1 000-2 000 U endo-1,4-beta-glucanase : 12 000–24 000 U alpha-amylase : 40–80 U. 3. For use in compound feed rich in non starch polysaccharides (mainly arabinoxylans and beta-glucans) e.g. containing more than 20% wheat and 15% sorghum and 5% maize.	17.07.2004[m]

[110] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C.
[111] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C.
[112] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucose from a cross-linked starch polymer per minute at pH 7.5 and 37°C
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

53	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553), bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) and endo-1,4-beta-xylanase produced by *Trichoderma viride* (NIBH FERM BP 4842) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 2 350 U[113]/g Endo-1,4-beta-glucanase: 4 000 U[114]/g Alpha-amylase: 400 U[115]/g Bacillolysin: 450 U[116]/g Endo-1,4-beta-xylanase: 20 000 U[117]/g	Piglets	2 months	endo-1,3(4)-beta-glucanase: 2 350 U endo-1,4-beta-glucanase: 4 000 U alpha-amylase: 400 U bacillolysin: 450 U endo-1,4-beta-xylanase: 20 000 U	- - - - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3 (4)-beta-glucanase: 2 350 U endo-1,4-beta-glucanase: 4 000 U alpha-amylase: 400 U bacillolysin: 450 U endo-1,4-beta-xylanase: 20 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 25% barley and 20% maize.	23.11.2004[o]

[113] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[114] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[115] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C
[116] 1 U is the amount of enzyme which makes 1 microgram of azo-casein soluble in trichloracetic acid per minute at pH 7.5 and 37°C.
[117] 1 U is the amount of enzyme which liberates 0.0067 micromoles of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 5.3 and 50°C
[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

			Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 1 175 U endo-1,4-beta-glucanase: 2 000 U alpha-amylase: 200 U bacillolysin: 225 U endo-1,4-beta-xylanase: 10 000 U	- - - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 1 175- 2 350 U endo-1,4-beta-glucanase: 2 000 - 4 000 U alpha-amylase: 200 - 400 U bacillolysin: 225- 450 U endo-1,4-beta-xylanase: 10 000 - 20 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 45 % wheat.	23.11.2004[9]

[9] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

54	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Endo-1,4-beta-xylanase EC 3.2.1.8	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94) , alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) and endo-1,4-beta-xylanase produced by *Trichoderma viride* (NIBH FERM BP 4842) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 10 000 U[118]/g Endo-1,4-beta-glucanase: 120 000 U[119]/g Alpha-amylase: 400 U[120]/g Endo-1,4-beta-xylanase: 210 000 U[121]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 1 000 U endo-1,4-beta-glucanase: 12 000 U alpha-amylase: 40 U endo-1,4-beta-xylanase: 21 000 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase : 1000 - 2000 U endo-1,4-beta-glucanase : 12 000 - 24 000 U alpha-amylase : 40 - 80 U endo-1,4-beta-xylanase : 21 000 – 42 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 45 % wheat.	23.11.2004[o]

[118] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[119] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[120] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C
[121] 1 U is the amount of enzyme which liberates 0.0067 micromoles of reducing sugars (xylose equivalents) from birchwood xylan per minute at pH 5.3 and 50°C
[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

55	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced *by Trichoderma longibrachiatum* (CBS 592.94), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) and bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 3 000 U[122]/g Endo-1,4-beta-glucanase: 5 000 U[123]/g Alpha-amylase: 540 U[124]/g Bacillolysin: 450 U[125]/g	Piglets	2 months	endo-1,3(4)-beta-glucanase: 1 500 U endo-1,4-beta-glucanase: 2 500 U alpha-amylase: 270 U bacillolysin: 225 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 1 500 - 3 000 U endo-1,4-beta-glucanase: 2 500 - 5 000 U alpha-amylase: 270 – 540 U bacillolysin: 225 - 450 U. 3. For use in compound feed rich in starch and non-starch polysaccharides, e.g. containing more than 35 % wheat and 15 % barley.	23.11.2004[0]
			Pigs for fattening	-	endo-1,3(4)-beta-glucanase: 1 500 U endo-1,4-beta-glucanase: 2 500 U alpha-amylase: 270 U bacillolysin: 225 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 1 500 - 3 000 U endo-1,4-beta-glucanase: 2 500 - 5 000 U alpha-amylase: 270 – 540 U bacillolysin: 225 - 450 U. 3. For use in compound feed rich in starch and non-starch polysaccharides, e.g. containing more than 50 % barley.	23.11.2004[0]

[122] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[123] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[124] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C.
[125] 1 U is the amount of enzyme which makes 1 microgram of azo-casein soluble in trichloracetic acid per minute at pH 7.5 and 37°C.
[0] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)
[0] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

			Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 1 500 U endo-1,4-beta-glucanase: 2 500 U alpha-amylase: 270 U bacillolysin: 225 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 1 500 - 3 000 U endo-1,4-beta-glucanase: 2 500 - 5 000 U alpha-amylase: 270 – 540 U bacillolysin: 225 - 450 U. 3. For use in compound feed rich in starch and non-starch polysaccharides, e.g. containing more than 50% maize or 50% wheat.	23.11.2004[o]
			Laying hens	-	endo-1,3(4)-beta-glucanase: 1 500 U endo-1,4-beta-glucanase: 2 500 U alpha-amylase: 270 U bacillolysin: 225 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 1 500 - 3 000 U endo-1,4-beta-glucanase: 2 500 - 5 000 U alpha-amylase: 270 – 540 U bacillolysin: 225 - 450 U. 3. For use in compound feed rich in starch and non-starch polysaccharides, e.g. containing more than 40% maize and 10% rye.	23.11.2004[o]

[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 1.2000, p. 28)

56	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) and bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 6 000 U[126]/g Endo-1,4-beta-glucanase: 3 500 U[127]/g Alpha-amylase: 1 400 U[128]/g Bacillolysin: 450 U[129]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 6 000 U endo-1,4-beta-glucanase: 3 500 U alpha-amylase: 1 400 U bacillolysin: 450 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase:6000 U endo-1,4-beta-glucanase: 3 500 U alpha-amylase: 1 400 U bacillolysin: 450 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40 % barley.	23.11.2004[0]

[126] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[127] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[128] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C
[129] 1 U is the amount of enzyme which makes 1 microgram of azo-casein soluble in trichloracetic acid per minute at pH 7.5 and 37°C
[0] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

57	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) and bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 3 000 U[130]/g Endo-1,4-beta-glucanase: 9 000 U[131]/g Alpha-amylase: 540 U[132]/g Bacillolysin: 450 U[133]/g	Chickens for fattening	-	endo-1,3(4)-beta-glucanase: 3 000 U endo-1,4-beta-glucanase: 9 000 U alpha-amylase: 540 U bacillolysin: 450 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 3 000 U endo-1,4-beta-glucanase: 9 000 U alpha-amylase: 540 U bacillolysin: 450 U. 3. For use in compound feed rich in starch and non-starch polysaccharides (mainly cellulose and hemicellulose), e.g. containing more than 20 % sunflower meal and 10 % soya meal.	23.11.2004[a]

[130] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[131] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[132] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C
[133] 1 U is the amount of enzyme which makes 1 microgram of azo-casein soluble in trichloracetic acid per minute at pH 7.5 and 37°C
[a] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

58	Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Endo-1,4-beta-glucanase EC 3.2.1.4 Alpha-amylase EC 3.2.1.1 Bacillolysin EC 3.4.24.28	Preparation of endo-1,3(4)-beta-glucanase produced by *Aspergillus aculeatus* (CBS 589.94), endo-1,4-beta-glucanase produced by *Trichoderma longibrachiatum* (CBS 592.94), alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553) and bacillolysin produced by *Bacillus amyloliquefaciens* (DSM 9554) having a minimum activity of: Endo-1,3(4)-beta-glucanase: 2 350 U[134]/g Endo-1,4-beta-glucanase: 5 000 U[135]/g Alpha-amylase: 400 U[136]/g Bacillolysin: 5 000 U[137]/g	Piglets	2 months	endo-1,3(4)-beta-glucanase: 2 350 U endo-1,4-beta-glucanase: 5 000 U alpha-amylase: 400 U bacillolysin: 5 000 U	- - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,3(4)-beta-glucanase: 2 350 U endo-1,4-beta-glucanase: 5 000 U alpha-amylase: 400 U bacillolysin: 5 000 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 30 % barley.	23.11.2004[ω]

[134] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 7.5 and 30°C
[135] 1 U is the amount of enzyme which liberates 0.0056 micromoles of reducing sugars (glucose equivalents) from carboxymethylcellulose per minute at pH 4.8 and 50°C
[136] 1 U is the amount of enzyme which hydrolyses 1 micromole of glucosidic linkages from water insoluble cross-linked starch polymer per minute at pH 7.5 and 37°C
[137] 1 U is the amount of enzyme which makes 1 microgram of azo-casein soluble in trichloracetic acid per minute at pH 7.5 and 37°C
[ω] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

59	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6 Subtilisin EC 3.4.21.62 Alpha-amylase EC 3.2.1.1 Polygalacturonase EC 3.2.1.15	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105), endo-1,3(4)-beta-glucanase and alpha-amylase produced by *Bacillus amyloliquefaciens* (DSM 9553), subtilisin produced by *Bacillus subtilis* (ATCC 2107), polygalacturonase produced by *Aspergillus aculeatus* (CBS 589.94) having a mimimum activity of: Endo-1,4-beta-xylanase: 300 U[138]/g Endo-1,3(4)-beta-glucanase: 150 U[139]/g Subtilisin: 4000 U[140]/g Alpha-amylase: 400 U[141]/g Polygalacturonase: 25 U[142]/g	Chickens for fattening	-	endo-1,4-beta-xylanase: 300 U endo-1,3(4)-beta-glucanase: 150 U subtilisin: 4 000 U alpha-amylase: 400 U polygalacturonase: 25 U	- - - - -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,4-beta-xylanase: 300 U endo-1,3(4)-beta-glucanase: 150 U subtilisin: 4 000 U alpha-amylase: 400 U polygalacturonase: 25 U. 3. For use in compound feed rich in starch and non-starch polysaccharides (mainly arabinoxylans and beta-glucans), e.g. containing more than 40% maize.	28.02.2005[9]

[138] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[139] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C
[140] 1 U is the amount of enzyme which liberates 1 microgram of phenolic compound (tyrosine equivalents) from a casein substrate per minute at pH 7.5 and 40°C
[141] 1 U is the amount of enzyme which liberates 1 micromole of glucosidic linkages from a water insoluble cross-linked starch polymer substrate per minute at pH 6.5 and 37°C
[142] 1 U is the amount of enzyme which liberates 1 micromole of reducing material (galacturonic acid equivalents) from a poly D-galacturonic substrate per minute at pH 5.0 and 40°C
[9] First authorisation Commission Regulation (EC) N° 418/2001 (OJ L 62, 2.3.2001, p. 3)

60	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma longibrachiatum* (ATCC 2105), endo-1,3(4)-beta-glucanase produced by *Trichoderma longibrachiatum* (ATCC 2106) having a minimum activity of: Endo-1,4-beta-xylanase: 5 000 U[143]/ml Endo-1,3(4)-beta-glucanase: 50 U[144]/ml	Chickens for fattening	-	endo-1,4-beta-xylanase: 500 U endo-1,3(4)-beta-glucanase: 5 U	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,4-beta-xylanase: 500- 2 500 U endo-1,3(4)-beta-glucanase: 5-25 U. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g. containing more than 20% barley and 40% wheat.	28.02.2005[9]
61	Endo-1,4-beta-xylanase EC 3.2.1.8 Endo-1,3(4)-beta-glucanase EC 3.2.1.6	Preparation of endo-1,4-beta-xylanase produced by *Trichoderma reesei* (CBS 529.94), endo-1,3(4)-beta-glucanase produced by *Trichoderma reesei* (CBS 526.94) having a minimum activity of: Powder form: Endo-1,4-beta-xylanase: 17 000 BXU[145]/g Endo-1,3(4)-beta-glucanase: 11 000 BU[146]/g Liquid form: Endo-1,4-beta-xylanase: 22 000 BXU/ml Endo-1,3(4)-beta-glucanase: 15 000 BU/ml	Chickens for fattening	-	endo-1,4-beta-xylanase: 17 000 BXU endo-1,3(4)-beta-glucanase: 11 000 BU	- -	1. In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. 2. Recommended dose per kilogram of complete feedingstuff: endo-1,4-beta-xylanase: 17 000 BXU endo-1,3(4)-beta-glucanase: 11 000 BU. 3. For use in compound feed rich in non-starch polysaccharides (mainly beta-glucans and arabinoxylans), e.g containing more than 40% barley or 55% wheat.	28.02.2005[9]

[143] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (xylose equivalents) from oat spelt xylan per minute at pH 5.3 and 50°C
[144] 1 U is the amount of enzyme which liberates 1 micromole of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 5.0 and 30°C
[9] First authorisation Commission Regulation (EC) N°418/2001 (OJ L 62, 2.3.2001, p. 3)
[145] 1 BXU is the amount of enzyme which liberates 0.06 micromoles of reducing sugars (xylose equivalents) from birch xylan per minute at pH 5.3 and 50°C
[146] 1 BU is the amount of enzyme which liberates 0.06 micromoles of reducing sugars (glucose equivalents) from barley beta-glucan per minute at pH 4.8 and 50°C
[9] First authorisation Commission Regulation (EC) N° 418/2001(OJ L 62, 2.3.2001, p. 3)

No. (or EC No.)	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					CFU/kg of complete feedingstuff			
Micro-organisms								
1	*Bacillus cereus* var. *toyoi* NCIMB 40112/ CNCM I -1012	Preparation of *Bacillus cereus* var. *toyoi* containing a minimum of 1×10^{10} CFU/g additive	Chickens for fattening	-	0.2×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: monensin sodium, lasolacid sodium, salinomycin sodium, decoquinate, robenidine, narasin, halofuginone.	1.3.2002[h]
			Laying hens	-	0.2×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	1.3.2002[h]
			Calves	6 months	0.5×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	1.3.2002[h]

[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

			Cattle for fattening	-	0.2×10^9	0.2×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Bacillus cereus* var. *toyoi* in the daily ration must not exceed 1.0×10^9 CFU for 100 kg body weight. Add 0.2×10^9 CFU for each additional 100 kg. body weight.	1.3.2002[h]
			Breeding does	-	0.1×10^9	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostat: robenidine	1.3.2002[h]
			Rabbits for fattening	-	0.1×10^9	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: robenidine, salinomycin sodium.	1.3.2002[h]

[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

3	*Saccharomyces cerevisiae* NCYC Sc 47	Preparation of *Saccharomyces cerevisiae* containing a minimum of 5×10^9 CFU/g additive	Rabbits for fattening	-	2.5×10^9	5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. May be used in compound feed containing the permitted coccidiostat: meticlorpindol.	30.06.2004[f]
			Sows	-	5×10^9	2.5×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	30.06.2004[f]
			Piglets	4 months	5×10^9	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	30.06.2004[f]
			Dairy cows	-	4×10^8	2×10^9	In the directions for use of the additive and the premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 5.6×10^9 CFU per 100 kg of body weight. Add 8.75×10^9 per each additional 100 kg body weight.	31.05.2005[r]

[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[r] First authorisation Commission Regulation (EC) N° 937/2001 (OJ L 130, 12.5.2001, p. 25)

5	*Saccharomyces cerevisiae* CBS 493.94	Preparation of *Saccharomyces cerevisiae* containing a minimum of : 1 x 10^8 CFU/g additive	Calves	6 months	2 x 10^8	2 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	30.06.2004[f]
			Cattle for fattening	-	1.7 x 10^8	1.7 x 10^8	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 7.5 x 10^8 CFU for 100 kg body weight. Add 1 x 10^8 CFU for each additional 100 kg body weight.	30.06.2004[g]
			Dairy cows	-	5 x 10^7	3.5 x 10^8	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 1.2 x 10^9 CFU for 100 kg body weight. Add 1.7 x 10^8 CFU per each additional 100 kg body weight.	31.05.2005[r]

[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[r] First authorisation Commission Regulation (EC) N° 937/2001 (OJ L 130, 12.5.2001, p. 25)

6	*Saccharomyces cerevisiae* CNCM I-1079	Preparation of *Saccharomyces cerevisiae* containing a minimum of : 2 x 10^{10} CFU/g additive	Sows	-	2 x 10^{9}	1 x 10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	30.06.2004[f]
			Piglets	4 months	6 x 10^{9}	3 x 10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	30.06.2004[f]
7	*Saccharomyces cerevisiae* CNCM I-1077	Preparation of *Saccharomyces cerevisiae* containing a minimum of : 2 x 10^{10} CFU/g additive	Dairy cows	-	5.5 x 10^{8}	2.1 x 10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 8.4 x 10^{9} CFU for 100 kg body weight. Add 1.8 x 10^{9} CFU for each additional 100 kg body weight.	30.06.2004[f]
			Cattle for fattening	-	1 x 10^{9}	1.5 x 10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 4.6 x 10^{9} CFU for 100 kg bodyweight. Add 2 x 10^{9} CFU for each additional 100 kg bodyweight.	30.06.2004[f]

[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)

8	*Enterococcus faecium* ATCC 53519 *Enterococcus faecium* ATCC 55593 [In a 1/1 ratio]	Mixture of : encapsulated *Enterococcus faecium* ATCC 53519 and encapsulated *Enterococcus faecium* ATCC 55593 containing a minimum of 2×10^8 CFU/g of the additive (i.e. a minimum of 1×10^8 CFU/g of each bacterium)	Chickens for fattening	-	1×10^8	1×10^8	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. May be used in compound feed containing the permitted coccidiostats : amprolium, decoquinate, halofuginone, lasalpcid sodium, maduramicin ammonium, monensin sodium , narasin, nicarbazin, narasin/nicarbazin, salinomycin sodium.	30.06.2004[f]
9	*Pediococcus acidilactici* CNCM MA 18/5M	Preparation of *Pediococcus acidilactici* containing a minimum of 1×10^{10} CFU/g of additive	Chickens for fattening	-	1×10^9	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium, meticlorpindol, decoquinate, halofuginone, narasin, salinomycin sodium, nicarbazin, maduramicin ammonium, diclazuril.	30.06.2004[g]
			Piglets	4 months	1×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[g]
			Pigs for fattening	-	1×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[g]

[f] First authorisation Commission Regulation (EC) N° 1436/98 (OJ L 191, 7.7.1998, p. 15)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)

10	*Enterococcus faecium* NCIMB 10415	Preparation of *Enterococcus faecium* containing a minimum of : Microencapsulated form : 1.0×10^{10} CFU/g additive 1.75×10^{10} CFU/g additive	Chickens for fattening	-	0.3×10^{9}	2.8×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium, amprolium/ ethopabate, diclazuril, halofuginone, maduramicin ammonium, meticlorpindol, meticlorpindol/ methylbenzoquate, monensin sodium, robenidine, salinomycin sodium.	30.06.2004[g]
			Pigs for fattening	-	0.35×10^{9}	1.5×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[g]
			Sows	-	0.2×10^{9}	1.25×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[g]

[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)

			Cattle for fattening	-	0.25×10^9	0.6×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Enterococcus faecium* in the daily ration must not exceed 1×10^9 CFU for 100 kg body weight . Add 1×10^9 CFU for each additional 100 kg body weight.	30.06.2004[g]
		Preparation of *Enterococcus faecium* containing a minimum of : Microencapsulated form : 1.0×10^{10} CFU/g additive 1.75×10^{10} CFU/g additive and Granulated form: 3.5×10^{10} CFU/g additive	Piglets	4 months	0.3×10^9	1.4×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. Granulated form to be used exclusively in milk replacers.	30.06.2004[g]
			Calves	6 months	0.35×10^9	6.6×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. Granulated form to be used exclusively in milk replacers.	30.06.2004[g]

[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)

11	*Enterococcus faecium* DSM 5464	Preparation of *Enterococcus faecium* containing a minimum of : 5×10^{10} CFU/g additive	Piglets	4 months	0.5×10^{9}	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[g]
			Chickens for fattening	-	0.5×10^{9}	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium, diclazuril, halofuginone, monensin-sodium, metilclorpindol, methylbenzoquate, nicarbazin.	01.04.2004[l]
			Calves	4 months	0.5×10^{9}	1×10^{9}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	01.04.2004[l]
12	*Lactobacillus farciminis* CNCM MA 67/4R	Preparation of *Lactobacillus farciminis* containing a minimum of 1×10^{9} CFU/g additive	Piglets	4 months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[h]

[g] First authorisation Commission Regulation (EC) N° 866/1999 (OJ L 108, 27.4.1999, p. 21)
[l] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)
[l] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)

13	*Enterococcus faecium* DSM 10 663/ NCIMB 10 415	Preparation of *Enterococcus faecium* containing a minimum of : Powder and granulated forms : 3.5×10^{10} CFU/g additive Coated form : 2.0×10^{10} CFU/g additive Liquid form : 1×10^{10} CFU/ml additive	Piglets	4 months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	30.06.2004[h]
			Calves	6 months	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting	26.07.2004[j]
			Chickens for fattening	-	1×10^{9}	1×10^{10}	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium, amprolium-ethopabat, decoquinate, diclazuril, halofuginone, lasalocid sodium, maduramicin ammonium, meticlorpindol/ methylbenzoquate, monensin sodium, narasin, nicarbazin, robenidine, salinomycin sodium.	26.07.2004[j]

[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)
[j] First authorisation Commission Regulation (EC) N°1636/1999 (OJ L 194, 27.7.1999, p. 17)

14	*Saccharomyces cerevisiae* MUCL 39 885	Preparation of *Saccharomyces cerevisiae* containing a minimum of : Powder, spheric and oval granulated forms : 1 x 10^9 CFU/ g additive	Piglets	4 months	3 x 10^9	3 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	30.06.2004[h]
			Cattle for fattening	-	9 x 10^9	9 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting. The quantity of *Saccharomyces cerevisiae* in the daily ration must not exceed 1.6 x 10^{10} CFU per 100 kg. body weight. Add 3.2 x 10^9 CFU for each additional 100 kg body weight.	30.06.2004[h]
15	*Enteroccocus faecium* NCIMB 11181	Preparation of *Enteroccocus faecium* containing a minimum of : Powder form: 4 x 10^{11} CFU/g additive Coated form: 5 x 10^{10} CFU/g additive	Calves	6 months	5 x 10^8	2 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	06.01.2004 [k]
			Piglets	4 months	5 x 10^8	2 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	06.01.2004[k]

[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[h] First authorisation Commission Regulation (EC) N°1411/1999 (OJ L 164, 30.6.1999, p. 56)
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)

16	*Enterococcus faecium* DSM 7134 *Lactobacillus rhamnosus* DSM 7133	Mixture of: *Enterococcus faecium* containing a minimum of: 7 x 10^9 CFU/g and of *Lactobacillus rhamnosus* containing a minimum of: 3 x 10^9 CFU/g	Calves	6 months	1 x 10^9	6 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	06.01.2004[k]
			Piglets	4 months	1 x 10^9	5 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	06.01.2004[k]
17	*Lactobacillus casei* NCIMB 30096 *Enterococcus faecium* NCIMB 30098	Mixture of *Lactobacillus casei* and *Enterococcus faecium* containing a minimum of: *Lactobacillus casei* 2 x 10^9 CFU/g and : *Enterococcus faecium* 6 x 10^9 CFU/g	Calves	6 months	*Lactobacillus casei* 0.5 x 10^9 *Enterococcus faecium* 1.5 x 10^9	*Lactobacillus casei* 1 x 10^9 *Enterococcus faecium* 3 x 10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	01.04.2004[l]

[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)
[k] First authorisation Commission Regulation (EC) N°2690/1999 (OJ L 326, 18.12.1999, p.33)
[l] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)

18	*Enterococcus faecium* CECT 4515	Preparation of *Enterococcus faecium* containing a minimum of $1x10^{10}$ CFU/g additive	Piglets	4 months	1×10^9	1×10^9	In the directions for use of the additive and premixture indicate the storage temperature, storage life and stability to pelleting.	01.04.2004[l]
			Calves	6 months	1×10^9	1×10^9	In the directions for use of the additive and premixture indicate the storage temperature, storage life and stability to pelleting.	01.04.2004[l]
19	*Streptococcus-infantarius* CNCM I-841 *Lactobacillus plantarum* CNCM I-840	Mixture of: *Streptococcus infantarius* and *Lactobacillus plantarum* containing a minimum of: ***Streptococcus infantarius*** 0.5×10^9 CFU/g and : ***Lactobacillus plantarum*** 2×10^9 CFU/g	Calves	6 months	*Streptococcus infantarius*: 1×10^9 *Lactobacillus plantarum:* 0.5×10^9	*Streptococcus infantarius*: 1×10^9 *Lactobacillus plantarum:* 0.5×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life and stability to pelleting.	17.07.2004[m]

[l] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)
[l] First authorisation Commission Regulation (EC) N° 654/2000 (OJ L 79, 30.3.2000, p. 26)
[m] First authorisation Commission Regulation (EC) N°1353/2000 (OJ L 155, 28.6.2000, p. 15)

20	*Bacillus licheniformis* DSM 5749 *Bacillus subtilis* DSM 5750 (In a 1/1 ratio)	Mixture of *Bacillus licheniformis* and *Bacillus subtilis* containing a minimum of 3.2×10^9 CFU/g of the additive (1.6×10^9 CFU/g of each bacterium)	Sows	15 days pre partum and during lactation period	0.96×10^9	1.92×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	23.11.2004[o]
			Pigs for fattening	-	0.48×10^9	1.28×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	23.11.2004[o]
			Chickens for fattening	-	3.2×10^9	3.2×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium/ethopabate, diclazuril, halofuginone, methylbenzoquate/meticlorpindol, monensin sodium, nicarbazin, robenidine and salinomycin sodium.	23.11.2004[o]
			Turkeys for fattening	-	1.28×10^9	3.2×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting. May be used in compound feed containing the permitted coccidiostats: amprolium/ethopabate, diclazuril, halofuginone, methylbenzoquate/meticlorpindol, monensin sodium, nifursol and robenidine.	23.11.2004[o]

[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)
[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)
[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)
[o] First authorisation Commission Regulation (EC) N° 2437/2000 (OJ L 280, 4.11.2000, p. 28)

			Calves	6 months	1.28×10^9	1.6×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	28.02.2005[q]
21	*Enterococcus faecium* DSM 3530	Preparation of *Enterococcus faecium* containing a minimum of $2,5 \times 10^9$ CFU/g	Calves	6 months	1×10^9	1×10^9	In the directions for use of the additive and premixture, indicate the storage temperature, storage life, and stability to pelleting.	28.02.2005[q]

[q] First authorisation Commission Regulation (EC) N° 418/2001 (OJ L 62, 2.3.2001, p. 3)

[q] First authorisation Commission Regulation (EC) N° 418/2001 (OJ L 62, 2.3.2001, p. 3)

No. (or EC No.)	Additive	Chemical formula, description	Species or category of animal	Maximum age	Minimum content	Maximum content	Other provisions	End of period of authorisation
					mg/kg of complete feedingstuff			
Radionuclide binders								
1. Radioactive caesium binders (^{137}Cs and ^{134} Cs)								
1.1	Ferric (III) ammonium hexacyanoferrate (II)	$NH_4Fe(III)[Fe(II)(CN)_6]$	Ruminants (domestic and wild)	-	50	500	Indicate in the instructions for use: "The quantity of Ferric (III) ammonium hexacyanoferrate (II) in the daily ration must be between 10 mg and 150 mg for 10 kg of body weight".	13.10.2001[b]
			Calves prior to the start of rumination	-	50	500	Indicate in the instructions for use: "The quantity of Ferric (III) ammonium hexacyanoferrate (II) in the daily ration must be between 10 mg and 150 mg for 10 kg of body weight".	13.10.2001[b]
			Lambs prior to the start of rumination	-	50	500	Indicate in the instructions for use: "The quantity of Ferric (III) ammonium hexacyanoferrate (II) in the daily ration must be between 10 mg and 150 mg for 10 kg of body weight"	13.10.2001[b]

[b] First authorisation Commission Directive 96/66/EC (OJ L 272, 25.10.1996, p. 32)
[b] First authorisation Commission Directive 96/66/EC (OJ L 272, 25.10.1996, p. 32)
[b] First authorisation Commission Directive 96/66/EC (OJ L 272, 25.10.1996, p. 32)

			Kids prior to the start of rumination	-	50	500	Indicate in the instructions for use: "The quantity of Ferric (III) ammonium hexacyanoferrate (II) in the daily ration must be between 10 mg and 150 mg for 10 kg of body weight".	13.10.2001[b]
			Pigs (domestic and wild)	-	50	500	Indicate in the instructions for use: "The quantity of Ferric (III) ammonium hexacyanoferrate (II) in the daily ration must be between 10 mg and 150 mg for 10 kg of body weight".	13.10.2001[b]

[b] First authorisation Commission Directive 96/66/EC (OJ L 272, 25.10.1996, p. 32)

[b] First authorisation Commission Directive 96/66/EC (OJ L 272, 25.10.1996, p. 32)