Directive 2002/32/EC of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed

DIRECTIVE 2002/32/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 7 May 2002

on undesirable substances in animal feed

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 152(4)(b) thereof,

Having regard to the proposal from the Commission⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee⁽²⁾,

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the Treaty⁽³⁾, in the light of the joint text approved by the Conciliation Committee on 26 March 2002,

Whereas:

- (1) Many amendments need to be made to Council Directive 1999/29/EC of 22 April 1999 on the undesirable substances and products in animal nutrition⁽⁴⁾. In the interests of clarity and efficiency the said Directive should be recast.
- (2) Livestock production occupies a very important place in farming in the Community and satisfactory results in terms of public and animal health, animal welfare, the environment and the livestock producers' finances depend to a large extent on the use of appropriate good quality feedingstuffs.
- (3) Rules on feedingstuffs are needed to ensure agricultural productivity and sustainability and to make it possible to ensure public and animal health, animal welfare and the environment. In addition, there is a need for comprehensive regulation on hygiene in order to guarantee good quality feedingstuffs on individual farms even when they are not commercially produced.
- (4) The same rules concerning the quality and safety of products intended for animal feed have to apply to the quality and safety of water consumed by the animals. Although the definition of feedingstuffs does not preclude water being considered as feedingstuff, it is not included in the non-exhaustive list of main feed materials, laid down by Council Directive 96/25/EC of 29 April 1996 on the circulation and use of feed materials⁽⁵⁾. The issue of water to be considered as feedingstuffs needs to be examined in the framework of that Directive.
- (5) It has been established that additives can contain undesirable substances. The scope of the Directive should therefore be extended to cover additives.

- (6) Products intended for animal feed may contain undesirable substances which can endanger animal health or, because of their presence in livestock products, human health or the environment.
- (7) It is impossible to eliminate fully the presence of undesirable substances but it is important that their content in products intended for animal feed should be reduced, with due regard to the substances' acute toxicity, bio-accumulability and degradability, in order to prevent undesirable and harmful effects. It is at present inappropriate to fix this content below the levels detectable by methods of analysis to be defined for the Community.
- (8) The methods for determining residues of undesirable substances are becoming increasingly sophisticated, so that even quantities of residues which are negligible for animal and human health can be detected.
- (9) Undesirable substances may be present in products intended for animal feed only in accordance with the conditions laid down in this Directive and may not be used in any other way for the purposes of animal feed. This Directive should therefore apply without affecting other Community provisions on feedingstuffs, and particularly the rules applicable to compound feedingstuffs.
- (10) This Directive must apply to products intended for animal feed as soon as they enter the Community. It must therefore be stipulated that the maximum levels of undesirable substances that are set apply in general from the date on which the products intended for animal feed are put into circulation or used, at all stages, and in particular as soon as they are imported.
- (11) Products intended for animal feed must be sound, genuine and of merchantable quality and therefore when correctly used must not represent any danger to human health, animal health or to the environment or adversely affect livestock production. Using or putting into circulation products intended for animal feed which contain levels of undesirable substances that exceed the maximum levels laid down in Annex I must therefore be prohibited.
- (12) The presence of certain undesirable substances in complementary feedingstuffs must be limited by fixing appropriate maximum levels.
- (13) While in certain cases a maximum level is fixed, taking account of background levels, continued effort is still needed to restrict the presence of some specific undesirable substances to the lowest possible levels in products intended for animal feed so as to reduce their presence in the feed and food chain. It should therefore be permitted, under this Directive, to lay down action thresholds well below the maximum levels fixed. Where such action thresholds are exceeded, investigations must be carried out to identify the sources of the undesirable substances and steps taken to reduce or eliminate such sources.
- (14) Where animal or human health or the environment is endangered, Member States should be allowed temporarily to reduce the fixed maximum permissible levels, to fix maximum levels for other substances or to prohibit the presence of such substances

in products intended for animal feed. In order to ensure a uniform application, any amendments to Annex I to this Directive should be decided on by emergency Community procedure, on the basis of supporting documents and the precautionary principle.

- (15) Products intended for animal feed that satisfy the requirements of this Directive may not be subject to restrictions on entry into circulation, as regards the level of undesirable substances they contain, other than those provided for in this Directive and in Council Directive 95/53/EC of 25 October 1995 fixing the principles governing the organisation of official inspections in the field of animal nutrition⁽⁶⁾.
- (16) Member States must make appropriate monitoring arrangements pursuant to Directive 95/53/EC to ensure that the requirements regarding undesirable substances are met when products intended for animal feed are used or circulated.
- (17) An appropriate Community procedure is needed for adapting the technical provisions in the Annexes to this Directive in the light of developments in scientific and technical knowledge.
- (18) In order to facilitate implementation of the proposed measures, there should be a procedure for close cooperation between the Member States and the Commission within the Standing Committee for Feedingstuffs set up by Decision 70/372/EEC⁽⁷⁾.
- (19) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission⁽⁸⁾,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

- 1 This Directive deals with undesirable substances in products intended for animal feed.
- 2 This Directive shall apply without prejudice to the provisions in:
 - a Council Directive 70/524/EEC of 23 November 1970 concerning additives in feedingstuffs⁽⁹⁾;
 - b Council Directive 96/25/EC and Council Directive 79/373/EEC of 2 April 1979 on the marketing of compound feedingstuffs⁽¹⁰⁾;
 - c Council Directive 76/895/EEC of 23 November 1976 relating to the fixing of maximum levels for pesticide residues in and on fruit and vegetables⁽¹¹⁾, Council Directive 86/362/EEC of 24 July 1986 on the fixing of maximum levels for pesticide residues in and on cereals⁽¹²⁾, Council Directive 86/363/EEC of 24 July 1986 on the fixing of maximum levels for pesticide residues in and on foodstuffs of animal origin⁽¹³⁾ and Council Directive 90/642/EEC of 27 November 1990 on the fixing of maximum levels for pesticide residues in and on certain products of plant origin, including fruit and vegetables⁽¹⁴⁾, where these residues are not listed in Annex I to this Directive;
 - d Community legislation concerning veterinary matters relating to public health and animal health;
 - e Council Directive 82/471/EEC of 30 June 1982 concerning certain products used in animal nutrition⁽¹⁵⁾;
 - f Council Directive 93/74/EEC of 13 September 1993 on feedingstuffs intended for particular nutritional purposes⁽¹⁶⁾.

Article 2

For the purposes of this Directive:

- (a) 'feedingstuffs' shall mean products of vegetable or animal origin, in their natural state, fresh or preserved, and products derived from the industrial processing thereof, and organic or inorganic substances, used singly or in mixtures, whether or not containing additives, for oral animal feeding;
- (b) 'feed materials' shall mean various products of vegetable or animal origin, in their natural state, fresh or preserved, and products derived from the industrial processing thereof, and organic or inorganic substances, whether or not containing additives, which are intended for use in oral animal feeding either directly as such or, after processing, in the preparation of compound feedingstuffs or as substrates for premixtures;
- (c) 'additives' shall mean additives as defined in Article 2(a) of Council Directive 70/524/ EEC;
- (d) 'premixtures' shall mean mixtures of additives or mixtures of one or more additives with substances used as carriers, intended for the manufacture of feedingstuffs;
- (e) 'compound feedingstuffs' shall mean mixtures of feed materials, whether or not containing additives, which are intended for oral animal feeding as complete or complementary feedingstuffs;
- (f) 'complementary feedingstuffs' shall mean mixtures of feedingstuffs which have a high content of certain substances and which, by reason of their composition, are sufficient for a daily ration only if used in combination with other feedingstuffs;
- (g) 'complete feedingstuffs' shall mean mixtures of feedingstuffs which, by reason of their composition, are sufficient for a daily ration;
- (h) 'products intended for animal feed' shall mean feed materials, premixtures, additives, feedingstuffs and all other products intended for use or used in animal feed;
- (i) 'daily ration' shall mean the average total quantity of feedingstuffs, calculated on a moisture content of 12 %, required daily by an animal of a given species, age class and yield, to satisfy all its needs;
- (j) 'animals' shall mean animals belonging to species normally fed and kept or consumed by man as well as animals living freely in the wild in cases where they are fed with feedingstuffs;
- (k) 'putting into circulation' or 'circulation' shall mean the holding of products intended for animal feed for the purposes of sale, including offering for sale, or any other form of transfer, whether free or not, to third parties, and the sale or other forms of transfer themselves;
- (l) 'undesirable substance' shall mean any substance or product, with the exception of pathogenic agents, which is present in and/or on the product intended for animal feed and which presents a potential danger to animal or human health or to the environment or could adversely affect livestock production.

Article 3

1 Products intended for animal feed may enter for use in the Community from third countries, be put into circulation and/or used in the Community only if they are sound, genuine

and of merchantable quality and therefore when correctly used do not represent any danger to human health, animal health or to the environment or could adversely affect livestock production.

2 In particular, products intended for animal feed shall be deemed not to be in conformity with paragraph 1 if the level of undesirable substances they contain does not comply with the maximum levels laid down in Annex I.

Article 4

1 Member States shall prescribe that the undesirable substances listed in Annex I may be tolerated in products intended for animal feed only subject to the conditions laid down therein.

In order to reduce or eliminate sources of undesirable substances of products intended for animal feed, Member States, in cooperation with economic operators, shall carry out investigations to identify the sources of undesirable substances, in cases where the maximum levels are exceeded and in cases where increased levels of such substances are detected, taking into account background levels. For a uniform approach in cases of increased levels it may be necessary to set action thresholds to trigger such investigations. These may be laid down in Annex II.

Member States shall transmit to the Commission and the other Member States all relevant information and findings of the source and the measures taken to reduce the level or elimination of the undesirable substances. This information shall be transmitted in the frame of the annual report to be transmitted to the Commission according to the provisions of Article 22 of Directive 95/53/EC except in those cases where the information is of immediate relevance for the other Member States. In this latter case, the information shall be transmitted immediately.

Article 5

Member States shall prescribe that products intended for animal feed containing levels of an undesirable substance that exceed the maximum level fixed in Annex I may not be mixed for dilution purposes with the same, or other, products intended for animal feed.

Article 6

In so far as there are no special provisions for complementary feedingstuffs, Member States shall prescribe that complementary feedingstuffs may not, taking into account the proportion prescribed for their use in a daily ration, contain levels of the undesirable substances listed in Annex I that exceed those fixed for complete feedingstuffs.

Article 7

1 Where a Member State has grounds, based on new information or a reassessment of existing information made since the provisions in question were adopted, demonstrating that a maximum level fixed in Annex I or an undesirable substance not listed therein present a danger to animal or human health or to the environment, that Member State may provisionally reduce the existing maximum level, fix a maximum level or prohibit the presence of that undesirable substance in products intended for animal feed. It shall immediately inform the other Member States and the Commission thereof, stating the grounds for its decision.

 $[^{F1}2$ An immediate decision shall be taken as to whether Annexes I and II should be amended. The Commission is empowered to adopt delegated acts in accordance with Article 10a amending those Annexes.

Where, in the case of those amendments, imperative grounds of urgency so require, the procedure provided for in Article 10b shall apply to delegated acts adopted pursuant to this Article.

The Member State may maintain the measures it has implemented as long as the Commission has not taken any decision.]

The Member State must ensure that the decision taken is made public.

Textual Amendments

F1 Substituted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

Article 8

 $[^{F2}[^{F1}]$ The Commission is empowered to adopt delegated acts in accordance with Article 10a amending Annexes I and II to adapt them to the scientific and technical developments.

Where, in the case of those amendments, imperative grounds of urgency so require, the procedure provided for in Article 10b shall apply to delegated acts adopted pursuant to this Article.]

- 2 Furthermore the Commission:
- -- shall periodically adopt consolidated versions of Annexes I and II incorporating any adaptations made pursuant to paragraph 1, in accordance with the regulatory procedure referred to in Article 11(2),
- [^{F1}is empowered to adopt delegated acts in accordance with Article 10a in order to supplement this Directive by defining acceptability criteria for detoxification processes as a complement to the criteria provided for products intended for animal feed which have undergone such processes.]]

3 Member States shall ensure that measures are taken to guarantee the correct application of any acceptable processes pursuant to paragraph 2 and the conformity of the detoxified products intended for animal feed with the provisions of Annex I.

Textual Amendments

- **F1** Substituted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).
- F2 Substituted by Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Two.

Article 9

Member States shall ensure that products intended for animal feed which comply with this Directive are not subject to any other restrictions on circulation as regards the presence of undesirable substances other than those provided for in this Directive and Directive 95/53/EC.

Article 10

Provisions that may have an effect upon public or animal health or on the environment shall be adopted after consultation with the appropriate Scientific Committee(s).

[^{F3}Article 10a

1 The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2 The power to adopt delegated acts referred to in Article 7(2) and Article 8(1) and (2) shall be conferred on the Commission for a period of five years from 26 July 2019. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3 The delegation of power referred to in Article 7(2) and Article 8(1) and (2) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4 Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making⁽¹⁷⁾.

5 As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6 A delegated act adopted pursuant to Article 7(2) and Article 8(1) and (2) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months from the notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Textual Amendments

F3 Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

Article 10b

1 Delegated acts adopted under this Article shall enter into force without delay and shall apply as long as no objection is expressed in accordance with paragraph 2. The notification of a delegated act to the European Parliament and to the Council shall state the reasons for the use of the urgency procedure.

2 Either the European Parliament or the Council may object to a delegated act in accordance with the procedure referred to in Article 10a(6). In such case, the Commission shall

repeal the act immediately following the notification of the decision to object by the European Parliament or by the Council.]

Textual Amendments

F3 Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

1 The Commission shall be assisted by the Standing Committee for Feedingstuffs set up by Article 1 of Council Decision $70/372/\text{EEC}^{(18)}$.

2 Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.]

Textual Amendments

- F2 Substituted by Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Two.
- **F4** Deleted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).

F5Article 12

Textual Amendments

F5 Deleted by Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Two.

Article 13

1 The Member States shall apply at least the provisions of this Directive to products intended for animal feed produced in the Community to be exported to third countries.

2 Paragraph 1 shall not affect the right of Member States to authorise re-exportation under the conditions laid down in Article 12 of Regulation (EC) No 178/2002⁽¹⁹⁾. The provisions of Article 20 thereof shall apply *mutatis mutandis*.

Article 14

1 Directive 1999/29/EC is hereby repealed as from 1 August 2003, without prejudice to the obligations of the Member States to comply with the deadlines set out in Part B of Annex III thereto for the transposition of the Directives listed in Part A of that Annex.

2 References to Directive 1999/29/EC shall be construed as references to this Directive and should be read in accordance with the correlation table in Annex III.

Article 15

Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive before 1 May 2003. They shall forthwith inform the Commission thereof.

The measures adopted shall apply as from 1 August 2003.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The procedure for making such reference shall be adopted by Member States.

Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

Article 16

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

Article 17

The Directive is addressed to the Member States.

[^{F6}ANNEX I

Textual Amendments

F6 Substituted by Commission Regulation (EU) No 574/2011 of 16 June 2011 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for nitrite, melamine, Ambrosia spp. and carry-over of certain coccidiostats and histomonostats and consolidating Annexes I and II thereto (Text with EEA relevance).

MAXIMUM LEVELS OF UNDESIRABLE SUBSTANCES, AS REFERRED TO IN ARTICLE 3(2)

SECTION I: INORGANIC CONTAMINANTS AND NITROGENOUS COMPOUNDS

Undesirable substance	Products intended for animal feed	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 %
[^{F11} 1. Arsenic ^a	Feed materials	2
	 with the exception of: — meal made from grass, from dried lucerne and from dried clover, and dried sugar beet pulp and dried molasses sugar beet pulp; 	4
	— palm kernel expeller;	4 ^b
	— peat; leonardite;	5 ^b
	— phosphates, calcareous marine algae;	10
	calcium carbonate; calcium and magnesium carbonate ⁱ ; calcareous marine shells;	15
	— magnesium oxide; magnesium carbonate;	20

— fish, other aquatic animals and products derived thereof;	25 ^b
— seaweed meal and feed materials derived from seaweed.	40 ^b
Iron particles used as tracer.	50
Feed additives belonging to the functional group of compounds of trace elements	30
with the exception of: — cupric sulphate pentahydrate; cupric carbonate; dicopper chloride trihydroxide; ferrous carbonate; dimanganese chloride trihydroxide	50
— zinc oxide; manganous oxide; cupric oxide.	100
Complementary feed	4
with the exception of: — mineral feed;	12
complementary feed for pet animals containing fish, other aquatic animals and products derived thereof and/or seaweed meal and feed materials derived from seaweed;	10 ^b
 — long-term supply formulations of	30

SECTION I:INORGANIC	C CONTAMINANTS AND NITRO	GENOUS COMPOUNDS
	feed for particular nutritional purposes with a concentration of trace elements higher than 100 times the established maximum content in complete feed;	
	Complete feed	2
	with the exception of: — complete feed for fish and fur animals;	10 ^b
	complete feed for pet animals containing fish, other aquatic animals and products derived thereof and/or seaweed meal and feed materials derived from seaweed.	10] ^b
[^{F12} 2. Cadmium	Feed materials of vegetable origin	1
	Feed materials of animal origin	2
	Feed materials of mineral origin	2
	with the exception of:	
	— phosphates.	10
	Feed additives belonging to the functional group of compounds of trace elements	10
	with the exception of:	
	 cupric oxide, manganous oxide, zinc oxide and manganous sulphate monohydrate. 	30

[^{F13}3.

Fluorine^g

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

SECTION I:INORGANIC CONTAMINANTS AND NITROGENOUS COMPOUNDS

to the fu	ditives belonging inctional groups ers and anti-caking	2
Premixt	ures ^f	15
Comple	mentary feed	0,5
with the	e exception of:	
_	mineral feed	
	containing < 7 % phosphorus ^h	5
	containing \geq 7 % phosphorus ^h	0,75 per 1 % phosphorus ^h , with a maximum of 7,5
	complementary feed for pet animals	2
	long-term supply formulations of feed for particular nutritional purposes with a concentration of trace elements higher than 100 times the established maximum content in complete feed;	15
Comple	te feed	0,5
with the	e exception of:	
_	complete feed for cattle (except calves), sheep (except lambs), goats (except kids) and fish;	1
	complete feed for pet animals.	2]
Feed ma with the	aterials e exception of:	150

SECTION I: INORGANIC CONTAMINANTS AND NITROGENOUS COMPOUNDS 500 feed materials of animal origin except marine crustaceans such as marine krill; calcareous marine shells: 3 000 marine crustaceans such as marine krill: 2 0 0 0 phosphates; 350 calcium carbonate; calcium and magnesium carbonate^j 600 magnesium oxide; [^{F11}1 250] calcareous marine algae. 3 000 Vermiculite (E 561). Complementary feed: 500 containing $\leq 4 \%$ phosphorus^h; 125 per 1 % phosphorus^h containing > 4 %phosphorus^h. Complete feed 150 with the exception of: 100 complete feed for pigs; 350 complete feed for poultry (except chicks) and fish; 250 complete feed for chicks; complete feed for cattle, sheep and goats

SECTION I:INORGAN	NIC CONTAMINANTS AND NITRO	GENOUS COMPOUNDS
	–– in lactation;	30
	–– other.	50
[^{F11} 4. Lead ¹	Feed materials	10
	with the exception of:	30
	— forage ^c ;	
	 phosphates, calcareous marine algae and calcareous marine shells; 	15
	— calcium carbonate; calcium and magnesium carbonate ⁱ ;	20
	— yeasts.	5
	Feed additives belonging to the functional group of compounds of trace elements	100
	with the exception of: zinc oxide;	400
	— manganous oxide, ferrous carbonate, cupric carbonate, copper (I) oxide.	200
	Feed additives belonging to the functional groups of binders and anti-caking agents	30
	with the exception of:	60
	 — clinoptilolite of volcanic origin; natrolite-phonolite. 	
	Premixtures ^f	200
	Complementary feed	10
	with the exception of:	15

SECTION I:INORGANIC	C CONTAMINANTS AND NITRO	GENOUS COMPOUNDS
	— mineral feed;	
	 long-term supply formulations of feed for particular nutritional purposes with a concentration of trace elements higher than 100 times the established maximum content in complete feed. 	60
	Complete feed.	5]
[^{F11} 5. Mercury ^d	Feed materials	0,1
	with the exception of: — fish, other aquatic animals and products derived thereof intended for the production of compound feed for food producing animals;	0,5
	— fish, other aquatic animals and products derived thereof intended for the production of compound feed for dogs, cats, ornamental fish and fur animals;	1,0 ^m
	 fish, other aquatic animals and products derived thereof as canned wet feed material for direct feeding of dogs and cats 	0,3
	— calcium carbonate; calcium and	0,3

	magnesium carbonate ⁱ .	
	Compound feed	0,1
	with the exception of:	0,2
	— mineral feed;	
	— compound feed for fish;	0,2
	— compound feed for dogs, cats, ornamental fish and fur animals.	0,3]]
[^{F12} 6. Nitrite ^e	Feed materials	15
U. MILLICE	with the exception of:	
	— fishmeal;	30
	— silage;	—
	products and by- products from sugar beet and sugarcane and from starch and alcoholic drink production.	
	Complete feed	15
	with the exception of:	
	 complete feed for dogs and cats with a moisture content exceeding 20 %. 	—]
[^{F10} 7. Melamine ⁱ	Feed with the exception of:	2,5
	— canned pet food	2,5 ^k
	— the following feed additives:	
	— guanidino acetic acid (GAA);	20

SE	CTION I:INORGANIC CO	NTAMINANTS AND NITRO	GENOUS COMPOUNDS
		— urea;	
		— biuret.	—]
a	The maximum levels refer to total ar	senic.	
b		orities, the responsible operator must perform than 2 ppm. This analysis is of particular in	
c	Forage includes products intended for	or animal feed such as hay, silage, fresh gras	ss, etc.
d	The maximum levels refer to total m	ercury.	
e	The maximum levels are expressed a	s sodium nitrite.	
f	cadmium and not the sensitivity of the Regulation (EC) No 1831/2003 of the use in animal nutrition (OJ L 268, 18 of the producer of premixtures to ensite the producer of premixtures to	premixtures takes into account the additives the different animal species to lead and cadin e European Parliament and of the Council of 8.10.2003, p. 29), in order to protect animal sure that, in addition to compliance with the e are in accordance with the maximum level	nium. As provided in Article 16 of of 22 September 2003 on additives for and public health, it is the responsibility maximum levels for premixtures, the
g	acid 1 N for 20 minutes at ambient to	al determination of fluorine, whereby extrac emperature. Equivalent extraction procedure n procedure has an equal extraction efficien	es can be applied for which it can be
h	The % of phosphorus is relative to a	feed with a moisture content of 12 %.	
i	The maximum level refers to melamine only. The inclusion of the structurally related compounds cyanuric acid, ammeline and ammelide in the maximum level will be considered at a later stage.		
j		e refers to the natural mixture of calcium ca n (EU) No 575/2011 of 16 June 2011 on the	
k	[^{F8} The maximum level is applicable to canned pet food as sold.]		
1	an analytical determination of lead,	aolinitic clay and in feed containing kaolini whereby extraction is performed in nitric ac rocedures can be applied for which it can b ficiency.]	id (5 % w/w) for 30 minutes at boiling
m	[^{F10} The maximum level is applicable	on wet weight basis.]	
SE	CTION II:MYCOTOXINS		
Ur	ndesirable substance	Products intended for animal feed	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 %
1.	Aflatoxin B_1	Feed materials	0,02
1.	Anatoxin \mathbf{b}_1	Complementary and complete feed	0,01
		with the exception of:	
		 compound feed for dairy cattle and calves, dairy sheep and lambs, dairy goats and kids, 	0,005

SECT	TION II:MYCOTOXIN	5	
		piglets and young poultry animals,	
		 compound feed for cattle (except dairy cattle and calves), sheep (except dairy sheep and lambs), goats (except dairy goats and kids), pigs (except piglets) and poultry (except young animals). 	0,02
2.	Rye ergot (<i>Claviceps</i> <i>purpurea</i>)	Feed materials and compound feed containing unground cereals.	1 000
SECT	TION III:INHERENT P	LANT TOXINS	
Und	esirable substance	Products intended for animal feed	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 %
1.	Free gossypol	Feed materials	20
1.	Thee gossypor	with the exception of:	
		— cottonseed,	[^{F11} 6 000]
		— cottonseed cakes and cottonseed meal.	1 200
		Complete feed	20
		with the exception of:	
		 complete feed for cattle (except calves), 	500
		 complete feed for sheep (except lambs) and goats 	300
		(except kids),	

b [^{F9}Upon request of the competent authorities, the responsible operator must perform an analysis to demonstrate that the content of total glucosinolates is lower than 30 mmol/kg. The method of analysis of reference is EN-ISO 9167-1:1995.]

		laying hens) and calves,	
		 complete feed for rabbits, lambs, kids and pigs (except piglets). 	60
2.	Hydrocyanic acid	Feed materials	50
	Trydroe yanne acid	with the exception of:	
		— linseed,	250
		— linseed cakes,	350
		 manioc products and almond cakes. 	100
		Complete feed	50
		with the exception of:	
		 complete feed for young chickens (< 6 weeks). 	10
3.	Theobromine	Complete feed	300
5.	Theodronnine	with the exception of:	
		 complete feed for pigs, 	200
		— complete feed for dogs, rabbits, horses and fur animals.	50
4.	vinyl	Complete feed for poultry	1 000
••	thiooxazolidone (5-	with the exception of:	
	vinyloxazolidine-2- thione)	 complete feed for laying hens. 	500
[^{F12} 5.	Valatila mustard aila	Feed materials	100
L 3.	Volatile mustard oil ^a	with the exception of:	
		— Camelina seed and products derived	4 000

content of total glucosinolates is lower than 30 mmol/kg. The method of analysis of reference is EN-ISO 9167-1:1995.]

SECTION III: INHERENT PLA	ANT TOXINS	
	thereof ^b , products derived from mustard seed ^b , rape seed and products derived thereof.	
	Complete feed	150
	with the exception of:	
	 complete feed for cattle (except calves), sheep (except lambs) and goats (except kids); 	1 000
	 complete feed for pigs (except piglets) and poultry. 	500]

a The maximum levels are expressed as allyl isothiocyanate.

b [^{F9}Upon request of the competent authorities, the responsible operator must perform an analysis to demonstrate that the content of total glucosinolates is lower than 30 mmol/kg. The method of analysis of reference is EN-ISO 9167-1:1995.]

SECTION IV:ORGANOCHLORINE COMPOUNDS (EXCEPT DIOXINS AND PCBs)

Undesirable substance		Products intended for animal feed	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 %
1.	Aldrin ^a	Feed materials and compound feed	0,01 ^b
2	Dieldrin ^a	with the exception of:	
2.	Dieldrin	— fats and oils,	0,1 ^b
		 compound feed for fish. 	0,02 ^b
3.	Camphechlor (toxaphene) –	Fish, other aquatic animals and products derived thereof	0,02
sum of indicator		with the exception of	
	congeners CHB 26, 50 and 62°	— fish oil.	0,2
		Complete feed for fish.	0,05

b Maximum level for aldrin and dieldrin, singly or combined, expressed as dieldrin.

c Numbering system according to Parlar, prefixed by either CHB or 'Parlar':

CHB 26: 2-endo,3-exo,5-endo,6-exo,8,8,10,10-octochlorobornane,

CHB 50: 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-nonachlorobornane, CHB 62: 2,2,5,5,8,9,9,10,10-nonachlorobornane.

4. Chlordane (sum of cis- and trans-		Feed materials and compound feed	0,02
	isomers and of	with the exception of:	
	oxychlordane, expressed as chlordane)	— fats and oils.	0,05
5.	DDT (sum of DDT-, DDD- (or	Feed materials and compound feed	0,05
	TDE-) and DDE-	with the exception of:	
	isomers, expressed as DDT)	— fats and oils.	0,5
[^{F13} 6	Endosulfan (sum of alpha- and beta- isomers and of	Feed materials and compound feed with the exception of:	0,1
	isomers and of endosulfansulphate expressed as endosulfan)	 cotton seed and products derived from the processing thereof, except crude cotton seed oil 	0,3
		- soybean and products derived from the processing thereof, except crude soybean oil	0,5
		— crude vegetable oil	1,0
		 complete feed for fish except for Salmonids 	0,005
		 complete feed for Salmonids 	0,05]
7.	Endrin (sum of endrin and of delta-ketoi-endrin, expressed as endrin)	Feed materials and compound feed	0,01
		with the exception of:	
a	Singly or combined expressed as die	eldrin.	
b	Maximum level for aldrin and dield	rin, singly or combined, expressed as dieldr	in.
c]	CHB 26: 2-endo,3-exo,5-endo	lar, prefixed by either CHB or 'Parlar': ,6-exo,8,8,10,10-octochlorobornane, ,6-exo,8,8,9,10,10-nonachlorobornane,	

CHB 62: 2,2,5,5,8,9,9,10,10-nonachlorobornane.

		— fats and oils.	0,05
8.	Heptachlor (sum of heptachlor and of heptachlorepoxide,	Feed materials and compound feed	0,01
		with the exception of:	
	expressed as heptachlor)	— fats and oils.	0,2
9.	Hexachlorobenzene (HCB)	Feed materials and compound feed	0,01
	(IICD)	with the exception of:	
		— fats and oils.	0,2
10.H (HC	exachlorocyclohexane H)	· ·	
	alpha-isomers	Feed materials and compound feed	0,02
		with the exception of:	
		— fats and oils.	0,2
	beta-isomers	Feed materials	0,01
		with the exception of:	
		— fats and oils.	0,1
		Compound feed	0,01
		with the exception of:	
		 compound feed for dairy cattle. 	0,005
	gamma-isomers	Feed materials and compound feed	0,2
		with the exception of:	
		— fats and oils.	2,0
a Si	ngly or combined expressed as die	eldrin.	
b M	aximum level for aldrin and dield	rin, singly or combined, expressed as dield	rin.

CHB 26: 2-endo,3-exo,5-endo,6-exo,8,8,10,10-octochlorobornane, CHB 50: 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-nonachlorobornane, CHB 62: 2,2,5,5,8,9,9,10,10-nonachlorobornane.

[^{F14}SECTION V:DIOXINS AND PCBs

Undesirable substance

Products intended for animal feed

			(ppt) ^a relative to a feed with a moisture content of 12 %
[^{F16} 1.	Dioxins [sum of	Feed materials of plant origin	0,75
[1.	polychlorinated	with the exception of:	
	dibenzo- <i>para</i> - dioxins (PCDDs) and polychlorinated	 vegetable oils and their by-products. 	0,75
	dibenzofurans (PCDFs) expressed in World Health	Feed materials of mineral origin	0,75
	Organisation (WHO) toxic equivalents using	Feed materials of animal origin:	
	equivalents, using the WHO-TEFs (toxic equivalency factors, 2005) ^b]	 Animal fat, including milk fat and egg fat, 	1,5
		 Other land animal products including milk and milk products and eggs and egg products. 	0,75
		— Fish oil,	5,0
		— Fish, other aquatic animals, and products derived thereof with the exception of fish oil, hydrolysed fish protein containing more than 20 % fat ^e and crustacea meal,	1,25
		 Hydrolysed fish protein containing more than 20 % fat; crustacea meal. 	1,75
		[^{F11} Feed additives belonging to the functional groups of binders and anti-caking agents] ^e	0,75
		Feed additives belonging to the functional group of compounds of trace elements.	1,0

rF14

[^{F14} SE	ECTION V:DIOXINS AN	ND PCBs	
		Premixtures	1,0
		Compound feed	0,75
		with the exception of:	
		 compound feed for pet animals and fish, 	1,75
		— compound feed for fur animals.]
Undesirable substance		Products intended for animal feed	Maximum content in ng WHO-PCDD/F-PCB- TEQ/kg (ppt) ^a relative to a feed with a moisture content of 12 %
2.	Sum of dioxins and dioxin-like PCBs (sum of polychlorinated dibenzo- <i>para</i> - dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs) expressed in World Health Organisation (WHO) toxic equivalents, using the WHO-TEFs (toxic equivalency factors), 2005 ^b)	Feed materials of plant origin with the exception of:	1,25
		 vegetable oils and their by-products 	1,5
		Feed materials of mineral origin	1,0
		Feed materials of animal origin:	
		 Animal fat, including milk fat and egg fat 	2,0
		 Other land animal products including milk and milk products and eggs and egg products 	1,25
		— Fish oil	20,0
		— Fish, other aquatic animals, and products derived thereof with the exception of fish oil and fish protein, hydrolysed, containing more than 20 % fat ^c	4,0

[^{F14} SE0	CTION V:DIOXINS AN	ND PCBs	
		 Fish protein, hydrolysed, containing more than 20 % fat 	9,0
		[^{F11} Feed additives belonging to the functional groups of binders and anti-caking agents] ^e	1,5
		Feed additives belonging to the functional group of compounds of trace elements	1,5
		Premixtures	1,5
		Compound feed with the exception of:	1,5
		— compound feed for pet animals and fish	5,5
		— compound feed for fur animals	—
Undesirable substance		Products intended for animal feed	Maximum content in µg/ kg (ppb) relative to a feed with a moisture content of 12 % ^a
3.	Non-dioxin-like	Feed materials of plant origin	10
5.	PCBs (sum of PCB 28, PCB 52, PCB	Feed materials of mineral origin	10
	101, PCB 138, PCB 153 and PCB 180 (ICES – 6) ^a)	Feed materials of animal origin:	
	(1025 - 0))	 Animal fat, including milk fat and egg fat 	10
		 Other land animal products including milk and milk products and eggs and egg products 	10
		— Fish oil	175
		 Fish, other aquatic animals and products derived 	30

ECTION V:DIOXINS AN	ID PCBs	
	thereof with the exception of fish oil and fish protein, hydrolysed, containing more than 20 % fat ^d	
	 Fish protein, hydrolysed, containing more than 20 % fat 	50
	[^{F11} Feed additives belonging to the functional groups of binders and anti-caking agents] ^e	10
	Feed additives belonging to the functional group of compounds of trace elements	10
	Premixtures	10
	Compound feed with the exception of:	10
	 compound feed for pet animals and fish 	40
	— compound feed for fur animals	[

[^{F14}SECTION V:DIOXINS AND PCBs

a Upper-bound concentrations; upper-bound concentrations are calculated on the assumption that all values of the different congeners below the limit of quantification are equal to the limit of quantification.

 b Table of TEF (= toxic equivalency factors) for dioxins, furans and dioxin-like PCBs: WHO-TEFs for human risk assessment based on the conclusions of the World Health Organisation (WHO) – International Programme on Chemical Safety (IPCS) expert meeting which was held in Geneva in June 2005 (Martin van den Berg et al., The 2005 World Health Organisation Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 93(2), 223–241 (2006))

Congener TEF value		
1		
1		
0,1		
0,1		
0,1		
0,01		
0,0003		

Abbreviations used: 'T' = tetra; 'Pe' = penta; 'Hx' = hexa; 'Hp' = hepta; 'O' = octa; 'CDD' = chlorodibenzodioxin; 'CDF' = chlorodibenzofuran; 'CB' = chlorobiphenyl.

2,3,7,8-TCDF	0,1
1,2,3,7,8-PeCDF	0,03
2,3,4,7,8-PeCDF	0,3
1,2,3,4,7,8-HxCDF	0,1
1,2,3,6,7,8-HxCDF	0,1
1,2,3,7,8,9-HxCDF	0,1
2,3,4,6,7,8-HxCDF	0,1
1,2,3,4,6,7,8-HpCDF	0,01
1,2,3,4,7,8,9-HpCDF	0,01
OCDF	0,0003
'Dioxin-like' PCBs: Non-ortho PCBs + Mono-ortho PCBs	
Non-ortho PCBs	
PCB 77	0,0001
PCB 81	0,0003
PCB 126	0,1
PCB 169	0,03
Mono-ortho PCBs	
PCB 105	0,00003
PCB 114	0,00003
PCB 118	0,00003
PCB 123	0,00003
PCB 156	0,00003
PCB 157	0,00003
PCB 167	0,00003
PCB 189	0,00003

Abbreviations used: 'T' = tetra; 'Pe' = penta; 'Hx' = hexa; 'Hp' = hepta; 'O' = octa; 'CDD' = chlorodibenzodioxin; 'CDF' = chlorodibenzofuran; 'CB' = chlorodiphenyl.

c Fresh fish and other aquatic animals directly delivered and used without intermediate processing for the production of feed for fur animals are not subject to the maximum levels, while maximum levels of 3,5 ng WHO-PCDD/F-TEQ/kg product and 6,5 ng WHO-PCDD/F-PCB-TEQ/kg product are applicable to fresh fish and 20,0 ng WHO-PCDD/F-PCB-TEQ/kg product is applicable to fish liver used for the direct feeding of pet animals, zoo and circus animals or used as feed material for the production of pet food. The products or processed animal proteins produced from these animals (fur animals, pet animals, zoo and circus animals) cannot enter the food chain and cannot be fed to farmed animals which are kept, fattened or bred for the production of food.

d Fresh fish and other aquatic animals directly delivered and used without intermediate processing for the production of feed for fur animals are not subject to the maximum levels, while maximum levels of 75 μg/kg product are applicable to fresh fish and 200 μg/kg product are applicable to fish liver used for the direct feeding of pet animals, zoo and circus animals or used as feed material for the production of pet food. The products or processed animal proteins produced from these animals (fur animals, pet animals, zoo and circus animals) cannot enter the food chain and cannot be fed to farmed animals which are kept, fattened or bred for the production of food.

e [^{F15}The maximum level is also applicable to the feed additives belonging to the functional groups of substances for the control of radionuclide contamination and substances for reduction of the contamination of feed by mycotoxins which are also belonging to the functional groups of binders and anti-caking agents.]]

Und	esirable substance	Products intended for animal feed Feed materials and compound feed	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 % 3 000
1.	Weed seeds and unground and uncrushed fruits containing alkaloids, glucosides or other toxic substances separately or in combination including		
	Datura sp.	_	1 000
2.	Crotalaria spp.	Feed materials and compound feed	100
3.	Seeds and husks from <i>Ricinus</i> <i>communis</i> L., <i>Croton tiglium</i> L. and <i>Abrus</i> <i>precatorius</i> L. as well as their processed derivatives ^a , separately or in combination	Feed materials and compound feed	10 ^b
4.	Unhusked beech mast — Fagus sylvatica L.	Feed materials and compound feed	Seeds and fruit as well as their processed derivatives may only be present in feed in trace amounts not quantitatively determinable
5.	Purghera — Jatropha curcas L.	Feed materials and compound feed	Seeds and fruit as well as their processed derivatives may only be present in feed in trace amounts not quantitatively determinable
6.	Seeds from Ambrosia spp.	Feed materials ^e with the exception of	50
	<i>лтогози</i> эрр.	 Millet (grains of Panicum miliaceum L.) and sorghum (grains of Sorghum 	200

[^{F13} SI	ECTION VI:HARMFUL	BOTANICAL IMPURITIES	
		<i>bicolor</i> (L) Moench s.l.) not directly fed to animals ^e	
		Compound feed containing unground grains and seeds	50
7.	Seeds from Indian mustard — Brassica juncea (L.) Czern. and Coss. ssp. integrifolia (West.) Thell. Sareptian mustard — Brassica juncea (L.) Czern. and Coss. ssp. juncea Chinese mustard — Brassica juncea (L.)	Feed materials and compound feed	Seeds may only be present in feed in trace amounts not quantitatively determinable
_	Czern. and Coss. ssp. <i>juncea</i> var. <i>lutea</i> Batalin Black mustard — <i>Brassica nigra</i> (L.) Koch Ethiopian mustard — <i>Brassica carinata</i> A. Braun		

a In so far determinable by analytical microscopy.

b Includes also seed husk fragments.

c In case unequivocal evidence is provided that the grains and seeds are intended for milling or crushing, there is no need to perform a cleaning of the grains and seeds containing con-compliant levels of seeds of *Ambrosia* spp. before milling or crushing on the condition that:

— the consignment is transported as a whole to the milling or crushing plant, and — the milling or crushing plant is informed in advance of the presence of high level of *Ambrosia* spp. seeds in order take additional prevention measures to avoid dissemination into the environment, and

— solid evidence is provided that prevention measures are taken to avoid dissemination of *Ambrosia* spp. seeds into the environment during transport to the crushing or milling plant, and

 the competent authority agrees to the transport, after having ensured that the abovementioned conditions are fulfilled.

In case these conditions are not fulfilled, the consignment must be cleaned before any transport into the EU and the screenings must be appropriately destroyed.]

Coccidiostat		Products intended for animal feed ^a	Maximum content in mg/ kg (ppm) relative to a feed with a moisture content of 12 %
[^{F10} 1.	Decoquinate	Feed materials	0,4
[I.	Decoquinate	Compound feed for	
		 laying birds and chickens reared for laying (> 16 weeks); 	0,4
		— other animal species	1,2
		Premixtures for use in feed in which the use of decoquinate is not authorised.]	b
[^{F16} 2.	Diclazuril	Feed materials	0,01
<u> </u> 2.		Compound feed for	
		 laying birds and chickens reared for laying (> 16 weeks), 	0,01
		 rabbits for fattening and breeding for the period before slaughter in which the use of diclazuril is prohibited (withdrawal feed), 	0,01
		 other animal species other than chickens reared for laying (< 16 weeks), chickens for fattening, guinea fowl and turkeys for fattening. 	0,03

SECTION VII: AUTHORISED FEED ADDITIVES IN NON-TARGET FEED FOLLOWING UNAVOIDABLE CARRY-OVER

a Without prejudice to the authorised levels in the frame of Regulation (EC) No 1831/2003 of the European Parliament and of the Council (OJ L 268, 18.10.2003, p. 29).

		Premixtures for use in feed in which the use of diclazuril is not authorised.]	b
3.	Halofuginone	Feed materials	0,03
5.	hydrobromide	Compound feed for	
		 laying birds, chickens reared for laying and turkeys (> 12 weeks), 	0,03
		 chickens for fattening and turkeys (< 12 weeks) for the period before slaughter in which the use of halofuginone hydrobromide is prohibited (withdrawal feed), 	0,03
		— other animal species.	0,09
		Premixtures for use in feed in which the use of halofuginone hydrobromide is not authorised.	b
[^{F16} 4.	Lasalocid A sodium	Feed materials	1,25
4.		Compound feed for	
		 dogs, calves, rabbits, equine species, dairy animals, laying birds, turkeys (> 16 weeks) and chickens reared for laying (> 16 weeks), 	1,25

SECTION VII:AUTHORISED FEED ADDITIVES IN NON-TARGET FEED FOLLOWING UNAVOIDABLE CARRY-OVER

		 chickens for fattening, chickens reared for laying (< 16 weeks) and turkeys (< 16 weeks) for the period before slaughter in which the use of lasalocid A sodium is prohibited (withdrawal feed), 	1,25
		 pheasants, guinea fowl, quails and partridges (except laying birds) for the period before slaughter in which the use of lasalocid A sodium is prohibited (withdrawal feed), 	1,25
		— other animal species.	3,75
		Premixtures for use in feed in which the use of lasalocid A sodium is not authorised.]	b
5.	Maduramicin	Feed materials	0,05
5.	ammonium alpha	Compound feed for	
		 equine species, rabbits, turkeys (> 16 weeks), laying birds and chickens reared for laying (> 16 weeks), 	0,05
		- chickens for fattening and turkeys (< 16	0,05

a Without prejudice to the authorised levels in the frame of Regulation (EC) No 1831/2003 of the European Parliament and of the Council (OJ L 268, 18.10.2003, p. 29).

FOLLOWING UNAVOIDAB		
	weeks) for the period before slaughter in which the use of maduramicin ammonium alpha is prohibited (withdrawal feed),	
	— other animal species.	0,15
	Premixtures for use in feed in which the use of maduramicin ammonium alpha is not authorised.	b
6. Monensin sodium	Feed materials	1,25
	Compound feed for	
	 equine species, dogs, small ruminants (sheep and goat), ducks, bovine, dairy cattle, laying birds, chickens reared for laying (> 16 weeks) and turkeys (> 16 weeks), 	1,25
	 chickens for fattening, chickens reared for laying (< 16 weeks) and turkeys (< 16 weeks) for the period before slaughter in which the use of monensin sodium is prohibited (withdrawal feed), 	1,25

a Without prejudice to the authorised levels in the frame of Regulation (EC) No 1831/2003 of the European Parliament and of the Council (OJ L 268, 18.10.2003, p. 29).

			3,75
— other anin species.		— other animal species.	5,75
		Premixtures for use in feed in which the use of monensin sodium is not authorised.	b
7.	Narasin	Feed materials	0,7
<i>'</i> .	Thatasiii	Compound feed for	
		— turkeys, rabbits, equine species, laying birds and chickens reared for laying (> 16 weeks),	0,7
		— other animal species.	2,1
		Premixtures for use in feed in which the use of narasin is not authorised.	b
3.	3. Nicarbazin	Feed materials	1,25
).	i vicar bazin	Compound feed for	
		 equine species, laying birds and chickens reared for laying (> 16 weeks), 	1,25
		— other animal species.	3,75
		Premixtures for use in feed in which the use of nicarbazin (alone or in combination with narasin) is not authorised.	b
9.	Robenidine	Feed materials	0,7
· ·	hydrochloride	Compound feed for	
	Without prejudice to the authorise of the Council (OJ L 268, 18.10.2)	d levels in the frame of Regulation (EC) No 1	831/2003 of the European Parliament and

SECTION VII:AUTHORISED FEED ADDITIVES IN NON-TARGET FEED FOLLOWING UNAVOIDABLE CARRY-OVER

	— laying birds and chickens reared for laying (> 16 weeks),		0,7
		— chickens for fattening, rabbits for fattening and breeding and turkeys for the period before slaughter in which the use of robenidine hydrochloride is prohibited (withdrawal feed),	0,7
		— other animal species.	2,1
		Premixtures for use in feed in which the use of robenidine hydrochloride is not authorised.	b
10.	Salinomycin	Feed materials	0,7
10.	sodium	Compound feed for	
		 equine species, turkeys, laying birds and chickens reared for laying (> 12 weeks), 	0,7
		 chickens for fattening, chickens reared for laying (< 12 weeks) and rabbits for fattening for the period before slaughter in which the use of salinomycin sodium 	0,7

a Without prejudice to the authorised levels in the frame of Regulation (EC) No 1831/2003 of the European Parliament and of the Council (OJ L 268, 18.10.2003, p. 29).

SECTION VII:AUTHORISED FEED ADDITIVES IN NON-TARGET FEED FOLLOWING UNAVOIDABLE CARRY-OVER			
		is prohibited (withdrawal feed),	
		— other animal species.	2,1
		Premixtures for use in feed in which the use of salinomycin sodium is not authorised	b
11.	Semduramicin	Feed materials	0,25
11.	sodium	Compound feed for	
		 laying birds and chickens reared for laying (> 16 weeks), 	0,25
		 chickens for fattening for the period before slaughter in which the use of semduramicin sodium is prohibited (withdrawal feed), 	0,25
		— other animal species.	0,75
		Premixtures for use in feed in which the use of semduramicin sodium is not authorised.	b

a Without prejudice to the authorised levels in the frame of Regulation (EC) No 1831/2003 of the European Parliament and of the Council (OJ L 268, 18.10.2003, p. 29).

b The maximum level of the substance in the premixture is the concentration which shall not result in a level of the substance higher than 50 % of the maximum levels established in the feed when the instructions for use of the premixture are followed.

Textual Amendments

F7 Inserted by Commission Regulation (EU) No 744/2012 of 16 August 2012 amending Annexes I and II to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for arsenic, fluorine, lead, mercury, endosulfan, dioxins, Ambrosia spp., diclazuril and lasalocid A sodium and action thresholds for dioxins (Text with EEA relevance).

F8 Inserted by Commission Regulation (EU) No 107/2013 of 5 February 2013 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for melamine in canned pet food (Text with EEA relevance).

- **F9** Inserted by Commission Regulation (EU) No 1275/2013 of 6 December 2013 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for arsenic, cadmium, lead, nitrites, volatile mustard oil and harmful botanical impurities (Text with EEA relevance).
- **F10** Substituted by Commission Regulation (EU) 2017/2229 of 4 December 2017 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for lead, mercury, melamine and decoquinate (Text with EEA relevance).
- **F11** Substituted by Commission Regulation (EU) 2019/1869 of 7 November 2019 amending and correcting Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for certain undesirable substances in animal feed (Text with EEA relevance).
- **F12** Substituted by Commission Regulation (EU) No 1275/2013 of 6 December 2013 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for arsenic, cadmium, lead, nitrites, volatile mustard oil and harmful botanical impurities (Text with EEA relevance).
- **F13** Substituted by Commission Regulation (EU) 2015/186 of 6 February 2015 amending Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for arsenic, fluorine, lead, mercury, endosulfan and Ambrosia seeds (Text with EEA relevance).
- **F14** Substituted by Commission Regulation (EU) No 277/2012 of 28 March 2012 amending Annexes I and II to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels and action thresholds for dioxins and polychlorinated biphenyls (Text with EEA relevance).
- **F15** Inserted by Commission Regulation (EU) 2019/1869 of 7 November 2019 amending and correcting Annex I to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for certain undesirable substances in animal feed (Text with EEA relevance).
- F16 Substituted by Commission Regulation (EU) No 744/2012 of 16 August 2012 amending Annexes I and II to Directive 2002/32/EC of the European Parliament and of the Council as regards maximum levels for arsenic, fluorine, lead, mercury, endosulfan, dioxins, Ambrosia spp., diclazuril and lasalocid A sodium and action thresholds for dioxins (Text with EEA relevance).

[^{F14}ANNEX II

ACTION THRESHOLDS TRIGGERING INVESTIGATIONS BY MEMBER STATES, AS REFERRED TO IN ARTICLE 4(2)

Undesirable substances		Products intended for animal feed	Action threshold in ng WHO- PCDD/F TEQ/kg (ppt) ^b relative to a feedingstuff with a moisture content of 12 %	Comments and additional information (e.g. nature of investigations to be performed)
[^{F16} 1.	Dioxins [sum of	Feed materials of plant origin	0,5	c
	polychlorinat	ewith the exception of:		
	dibenzo- <i>para</i> dioxins (PCDDs), polychlorinat dibenzofuran		0,5	c

SECTION: DIOXINS AND PCBs

(PCDFs) expressed in World Health Organisation (WHO) toxic equivalents, using the WHO-	Feed materials of mineral origin Feed materials of animal origin: — Animal fat, including milk fat and egg fat,	0,5	c c
TEFs (toxic equivalency factors, 2005) ^a]	 Other land animal products including milk and milk products and eggs and egg products, 	0,5	c
	— Fish oil,	4,0	d
	 Fish, other aquatic animals and products derived thereof with the exception of fish oil, hydrolysed fish protein containing more than 20 % fat and crustacea meal, 	0,75	d
	 Hydrolysed fish protein containing more than 20 % fat; crustacea meal. 	1,25	đ
	Feed additives belonging to the	0,5	c

		functional groups of binders and anti- caking agents		
		Feed additives belonging to the functional group of compounds of trace elements	0,5	c
		Premixtures	0,5	c
		Compound feed with the exception of:	0,5	c
		 compound feed for pet animals and fish, 	1,25	d
		— compound feed for fur animals.]
2.	Dioxin- like PCBs (sum of polychlorinat biphenyls (PCBs) expressed in World	Feed materials of plant origin with the exception of:	0,35	c
		ed vegetable oils and their by- products	0,5	c
	Health Organisation	Feed materials of mineral origin	0,35	c
	(WHO) toxic equivalents,	Feed materials of animal origin:		
	using the WHO- TEFs (toxic equivalency factors, 2005) ^a)	 Animal fat, including milk fat and egg fat 	0,75	c
		 Other land animal products including milk and milk products and eggs and egg products 	0,35	c

— Fish oil	11,0	d
 Fish, other aquatic animals and products derived thereof with the exception of fish oil and fish protein, hydrolysed, containing more than 20 % fat^e 	2,0	đ
 Fish protein, hydrolysed, containing more than 20 % fat 	5,0	d
Feed additives belonging to the functional groups of binders and anti- caking agents	0,5	¢
Feed additives belonging to the functional group of compounds of trace elements	0,35	c
Premixtures	0,35	c
Compound feed with the exception of:	0,5	c
— compound feed for pet animals and fish	2,5	d
 compound feed for fur animals 		

a Table of TEF (= toxic equivalency factors) for dioxins, furans and dioxin-like PCBs:

WHO-TEFs for human risk assessment based on the conclusions of the World Health Organisation (WHO) – International Programme on Chemical Safety (IPCS) expert meeting which was held in Geneva in June 2005 (Martin van den Berg

et al., The 2005 World Health Organisation Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 93(2), 223–241 (2006))

Congener	TEF value
Dibenzo-para-dioxins ('PCDDs') and D furans (PCDFs)	ibenzo-para-
2,3,7,8-TCDD	1
1,2,3,7,8-PeCDD	1
1,2,3,4,7,8-HxCDD	0,1
1,2,3,6,7,8-HxCDD	0,1
1,2,3,7,8,9-HxCDD	0,1
1,2,3,4,6,7,8-HpCDD	0,01
OCDD	0,0003
2,3,7,8-TCDF	0,1
1,2,3,7,8-PeCDF	0,03
2,3,4,7,8-PeCDF	0,3
1,2,3,4,7,8-HxCDF	0,1
1,2,3,6,7,8-HxCDF	0,1
1,2,3,7,8,9-HxCDF	0,1
2,3,4,6,7,8-HxCDF	0,1
1,2,3,4,6,7,8-HpCDF	0,01
1,2,3,4,7,8,9-HpCDF	0,01
OCDF	0,0003
'Dioxin-like' PCBs: Non-ortho PCBs + PCBs	Mono-ortho
Non-ortho PCBs	
PCB 77	0,0001
PCB 81	0,0003
PCB 126	0,1
PCB 169	0,03
Mono-ortho PCBs	
PCB 105	0,00003
PCB 114	0,00003
PCB 118	0,00003
PCB 123	0,00003
PCB 156	0,00003
PCB 157	0,00003
PCB 167	0,00003
PCB 189	0,00003

Abbreviations used: 'T' = tetra; 'Pe' = penta; 'Hx' = hexa; 'Hp' = hepta; 'O' = octa; 'CDD' = chlorodibenzodioxin; 'CDF' = chlorodibenzofuran; 'CB' = chlorobiphenyl.

b Upper-bound concentrations; upper-bound concentrations are calculated on the assumption that all values of the different congeners below the limit of quantification are equal to the limit of quantification.

c Identification of source of contamination. Once source is identified, take appropriate measures, where possible, to reduce or eliminate source of contamination.

d In many cases it might not be necessary to perform an investigation into the source of contamination as the background level in some areas is close to or above the action level. However, in cases where the action level is exceeded, all information, such as sampling period, geographical origin, fish species etc., shall be recorded with a view to future measures to manage the presence of dioxins and dioxin-like compounds in these materials for animal nutrition.]]

ANNEX III

CORRELATION TABLE

This Directive
Article 1
Article 2(a)
Article 2(b)
Article 2(g)
Article 2(f)
Article 2(e)
Article 2(i)
Article 2(j)
—
Article 2(c)
Article 2(d)
Article 2(h)
Article 2(k)
Article 2(l)
Article 3
Article 4(1)
—
Article 4(2)
—
—
Article 5
Article 6
Article 7
Article 8
Article 9

Article 12	
	Article 10
Article 13	Article 11
Article 14	Article 12
Article 15	Article 13
Article 16	—
	Article 14
	Article 15
Article 17	Article 16
Article 18	Article 17
Annex I	Annex I
Annex II	—
Annex III	—
Annex IV	Annex II

- (1) OJ C 89 E, 28.3.2000, p. 70 and OJ C 96 E, 27.3.2001, p. 346.
- (2) OJ C 140, 18.5.2000, p. 9.
- (3) Opinion of the European Parliament of 4 October 2000 (OJ C 178, 22.6.2001, p. 160), Council Common Position of 17 September 2001 (OJ C 4, 7.1.2002, p. 1) and Decision of the European Parliament of 12 December 2001 (not yet published in the Official Journal). Decision of the European Parliament of 10 April 2002 and Decision of the Council of 22 April 2002.
- (4) OJ L 115, 4.5.1999, p. 32.
- (5) OJ L 125, 23.5.1996, p. 35. Directive as last amended by European Parliament and Council Directive 2000/16/EC (OJ L 105, 3.5.2000, p. 36).
- (6) OJ L 265, 8.11.1995, p. 17. Directive as last amended by Directive 2001/46/EC of the European Parliament and of the Council (OJ L 234, 1.9.2001, p. 55).
- (7) OJ L 170, 3.8.1970, p. 1.
- (8) OJ L 184, 17.7.1999, p. 23.
- (9) OJ L 270, 14.12.1970, p. 1. Directive as last amended by Commission Regulation (EC) No 2205/2001 (OJ L 297, 15.11.2001, p. 3).
- (10) OJ L 86, 6.4.1979, p. 30. Directive as last amended by the European Parliament and Council Directive 2002/2/EC (OJ L 63, 6.3.2002, p. 23).
- (11) OJ L 340, 9.12.1976, p. 26. Directive as last amended by Commission Directive 2000/57/EC (OJ L 244, 29.9.2000, p. 76).
- (12) OJ L 221, 7.8.1986, p. 37. Directive as last amended by Commission Directive 2002/23/EC (OJ L 64, 7.3.2002, p. 13).
- (13) OJ L 221, 7.8.1986, p. 43. Directive as last amended by Directive 2002/23/EC.
- (14) OJ L 350, 14.12.1990, p. 71. Directive as last amended by Directive 2002/23/EC.
- (15) OJ L 213, 21.7.1982, p. 8. Directive as last amended by Directive 1999/20/EC (OJ L 80, 25.3.1999, p. 20).
- (16) OJL 237, 22.9.1993, p. 23. Directive as last amended by Directive 1999/29/EC (OJL 115, 4.5.1999, p. 32).
- (17) [^{F3}OJ L 123, 12.5.2016, p. 1.]
- (18) [^{F2}[OJ L 170, 3.8.1970, p. 1.]]
- (19) Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1).

Textual Amendments

- F2 Substituted by Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11 March 2009 adapting a number of instruments subject to the procedure referred to in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny Adaptation to the regulatory procedure with scrutiny — Part Two.
- **F3** Inserted by Regulation (EU) 2019/1243 of the European Parliament and of the Council of 20 June 2019 adapting a number of legal acts providing for the use of the regulatory procedure with scrutiny to Articles 290 and 291 of the Treaty on the Functioning of the European Union (Text with EEA relevance).