



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels,  
COM(2008) XXX

Draft

**COMMISSION REGULATION (EC) No .../..**

**of [...]**

**amending Regulation (EC) No 2003/2003 of the European Parliament and of the Council  
relating to fertilisers for the purposes of adapting Annexes I and IV thereto to technical  
progress**

**(Text with EEA relevance)**

## EXPLANATORY MEMORANDUM

### Objectives

Regulation (EC) No 2003/2003 of the European Parliament and of the Council relating to fertilisers aims to ensure the free circulation on the internal market of “EC fertiliser” i.e. of those fertilisers that meet certain requirements for their nutrient content, their safety, and their lack of adverse effects on the environment. It does so, *inter alia*, by listing in Annex I a number of standard types of fertiliser for which the minimum nutrient content is specified, and by listing in Annex IV the methods of sampling and analysis that are to be used to verify that nutrient content.

The objectives of this proposal are, first, to change the specification of the straight nitrogenous fertiliser type designated “sulphate of ammonia” to allow the addition of calcium nitrate (nitrate of lime). Second, to allow the use of certain nitrification and urease inhibitors with fertilisers that provide nitrogen as the primary nutrient. Third, to clarify some of the numerical values given in the analysis methods which are too high by a factor of two. Those values should be halved to avoid incorrect results in the analysis of fertiliser nutrient content. The proposed changes are limited to the clarification and harmonisation of the existing provisions, and to the introduction of new fertiliser types. As such they have no financial impact.

The annexes to the Regulation are technical matters that can be adapted by comitology. The measures necessary for the implementation of this new proposal 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<sup>1</sup>.

In accordance with the principles of subsidiarity and of proportionality, as stated in Article 5 of the Treaty, the objectives of the proposed actions to ensure the internal market in fertilisers cannot be achieved individually by Member States if there are no common technical criteria throughout the Community. The objectives can therefore be better achieved by Community actions. These actions should be limited to the minimum required to achieve these objectives and should not exceed what is necessary to this end. A regulation is the appropriate legal instrument as the proposal aims at amending a regulation that already imposes similar legal requirements on manufacturers and importers. As the amending proposal aims at modifying the existing list of fertiliser types and the methods of analysis, such technical legislation need to be applied at the same time and in the same manner throughout the Community, and this can only be guaranteed by a regulation.

### Sulphate of ammonia

In Regulation (EC) No 2003/2003, entry number 4 in Table A.1 of Annex I (i.e. fertiliser type A.1.4) prescribes that fertilisers with the type designation “sulphate of ammonia” shall contain a minimum amount of 20% of ammoniacal nitrogen, a value that corresponds to a purity of ammonium sulphate greater than 94%. Consequently, combination of ammonium sulphate with nitrogenous EC fertiliser types that contain nitric nitrogen instead of

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<sup>1</sup> OJ L 184, 17.7.1999, p. 23

ammoniacal nitrogen, for example fertiliser type A.1.1(a), calcium nitrate (nitrate of lime), will fail to meet the minimum ammoniacal nitrogen content specified for fertiliser type A.1.4. Furthermore, such combinations do not meet the requirements of any other EC fertiliser type. Thus whereas fertiliser types A.1.4 and A.1.1(a) may each be designated “EC fertiliser”, and may therefore circulate freely on the internal market, a combination of the two types may not be designated “EC fertiliser”, and free circulation on the internal market is not guaranteed for such a combination.

Although they are not recognised as “EC fertilisers”, combinations of fertiliser types A.1.4 and A.1.1 (a) are agronomically useful, even if the amount of type A.1.1 (a) is added as a processing aid in amounts that are not agronomically significant, and have been used successfully in two Member States for a number of years. To make such combinations more easily available to farmers throughout the EU, it is proposed to adapt the entry 4 of Table A.1 by introducing, in column 4, an alternative expression of minimum nutrient content, namely for total nitrogen instead of ammoniacal nitrogen, that will apply to ammonium sulphate fertilisers that are combined with calcium nitrate (nitrate of lime). The entries in column 3, 5 and 6 will be modified accordingly.

### **Dicyandiamide and NBPT**

Ideally, fertilisers should release nutrients at the same rate as they are taken up by crops. For nitrogen in particular, the release rate can be much faster than the rate of uptake by crops. This imbalance between nutrient supply and demand results in the run-off of the excess nitrogen from the land to surface waters. Not only is this run-off wasteful of fertiliser, but it can contribute to eutrophication of surface waters in vulnerable zones. Directive 91/676/EEC on nitrates from agricultural sources has led to the designation of such vulnerable zones, and farmers in these areas need to follow a code of good agricultural practice which is designed to prevent eutrophication.

In addition to pollution of surface waters, nitrogen fertilisers can also contribute to air pollution through the release of gases. However, the use of nitrification and urease inhibitors can reduce emissions, not only to surface waters, but also to the atmosphere and thereby contribute towards fulfilling the objectives of the UNECE Göteborg Protocol to abate acidification, eutrophication and ground-level ozone. The nitrification inhibitors reduce the amount of acidic  $N_2O$  gas released from the soil to the atmosphere, whereas the urease inhibitors reduce emissions of ammonia to the atmosphere where it reacts to form acid salts, which subsequently return to the soil as acid rain.

In Regulation (EC) No 2003/2003, two EC fertilisers already foresee the use of nitrification inhibitors, namely, type 16: ammonium sulphate with nitrification inhibitor dicyandiamide (DCD), and type 17: ammonium sulphonitrate with nitrification inhibitor dicyandiamide (DCD). However, other fertiliser types using the substance N-(n-butyl)thiophosphoric triamide (NBPT) as a urease inhibitor has also been successfully introduced in some Member States.

To make these additional fertiliser types and nitrification/urease inhibitors available more widely, and in a flexible way, it is proposed to introduce into Annex I two separate lists of nitrification and urease inhibitors for use with those existing EC fertiliser types that contain ammonium or urea nitrogen. These lists of nitrification and urease inhibitors should specify the identity and composition of the inhibitor (column 3) and also mention any fertiliser types for which its use is not suitable (column 4). It will be also possible to mention other

nitrification or urease inhibitor with which mixing is allowed. In this case, the inhibitor ratio should be described (column 5). Following the introduction of these rules of general application, the specific fertiliser types 16 and 17 would be redundant, and should therefore be deleted.

### **Iodine concentration**

The numerical values for the iodine concentration in Annex IV should be amended to address the change from “normality” to “moles per litre”. An analogous change was made for sulphuric acid in the second adaptation to technical progress.

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**(Text with EEA relevance)**

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers<sup>2</sup>, and in particular Article 31(1) and (3) thereof,

Whereas:

- (1) Article 3 of Regulation (EC) No 2003/2003 provides that a fertiliser belonging to a type of fertiliser listed in Annex I thereto and complying with the conditions laid down in that Regulation may be designated “EC fertiliser”.
- (2) Ammonium sulphate and calcium nitrate (nitrate of lime) are both listed as fertiliser types in Annex I to Regulation (EC) No 2003/2003. However, combinations of those two fertiliser types may not be designated “EC fertiliser”. As combinations of ammonium sulphate and calcium nitrate (nitrate of lime) have been used successfully in two Member States, such combinations should be recognised as “EC fertilisers” so that they can be made more easily available to farmers throughout the Community.
- (3) Many of the primary nutrient fertiliser types containing nitrogen that are listed in Annex I tend to release their nitrogen too rapidly for crops to benefit fully from it, and as a result the excess nitrogen may potentially cause harm to the environment.
- (4) As regards two EC fertiliser types listed in Annex I to Regulation (EC) No 2003/2003, the addition of dicyandiamide, one of a number of substances known as nitrification inhibitors, may prevent any such potential harm to the environment. Other types of EC fertiliser may contain nitrogen in a different form for which nitrification inhibitors are not effective. For those other types, urease inhibitors may offer a satisfactory solution.

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<sup>2</sup> OJ L 104, 21.11.2003, p. 1. Regulation as last amended by Commission Regulation (EC) No 162/2007 (OJ L 51, 20.2.2007, p. 7).

- (5) To allow greater access to the agronomic and environmental benefits of nitrification or urease inhibitors, the use of nitrification or urease inhibitors should be allowed for most types of nitrogen fertilisers, and more types of inhibitors should be allowed.
- (6) A list of authorised nitrification and urease inhibitors should therefore be introduced in Annex I to Regulation (EC) No 2003/2003.
- (7) Annex IV to Regulation (EC) No 2003/2003 provides detailed descriptions of the methods of analysis to be used to measure the nutrient content of EC fertilisers. Those descriptions, in so far as they concern iodine concentration, need to be adjusted in order to have correct analysis values.
- (8) Regulation (EC) No 2003/2003 should therefore be amended accordingly.
- (9) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 32 of Regulation (EC) No 2003/2003,

HAS ADOPTED THIS REGULATION:

*Article 1*

1. Annex I to Regulation (EC) No 2003/2003 is amended in accordance with Annex I to this Regulation.
2. Annex IV to Regulation (EC) No 2003/2003 is amended in accordance with Annex II to this Regulation.

*Article 2*

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

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

Done at Brussels, [...]

*For the Commission*

[...]

*Member of the Commission*

## **ANNEX I**

Annex I to Regulation (EC) No 2003/2003 is amended as follows:

- (1) in Table A.1, the entry for fertiliser type 4 “sulphate of ammonia” is replaced by the following:

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4	Sulphate of ammonia	Chemically obtained product containing ammonium sulphate as its essential ingredient, possibly with up to 15% calcium nitrate (nitrate of lime).	19.7% N Nitrogen expressed as total nitrogen.  Maximum content of nitric nitrogen 2.2% N if calcium nitrate (nitrate of lime) is added.	When marketed in the form of a combination of ammonium sulphate and calcium nitrate (nitrate of lime), the designation must include “with up to 15% calcium nitrate (nitrate of lime)”.	Ammoniacal nitrogen.  Total nitrogen if calcium nitrate (nitrate of lime) is added
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- (2) in Table A.1, the entries for fertiliser types 16, 17 and footnote (a) are deleted. Type 18 becomes type 16 :
- (3) the following section F is added:

**“F. Nitrification and urease inhibitors**

The urease and nitrification inhibitors listed in the tables F.1. and F.2. below may be added to the nitrogenous fertilisers types listed in sections A.1., B.1., B.2., B.3., C.1. and C.2. of Annex I subject to the following provisions:

- (1) at least 50% of the total nitrogen content of the fertiliser consists of the nitrogen forms specified in column 3;
- (2) they do not belong to the fertiliser types mentioned in column 4.

Fertilisers to which a nitrification inhibitor listed in table F.1. has been added shall have the words “with nitrification inhibitor ([type designation of nitrification inhibitor])” added to their type designation.

Fertilisers to which a urease inhibitor listed in table F.2. has been added shall have the words “with urease inhibitor ([type designation of urease inhibitor])” added to their type designation.

Technical information, as complete as possible, must be provided with each package or bulk consignment by the person responsible for marketing. This information must enable the user in particular to determine the rates and timing of application in relation to the crop being grown.

New nitrification inhibitors or urease inhibitors may be included in the Tables F1 or F2 respectively after evaluation of the technical files submitted in accordance with guidelines to be elaborated for these compounds.

F.1. *Nitrification inhibitors*

No	Type designation and composition of the nitrification inhibitor	Minimum and maximum inhibitor content as a percentage by mass of the total nitrogen present as ammonium nitrogen and urea nitrogen.	EC fertiliser types for which the inhibitor may not be used	Description of nitrification inhibitors with which mixtures are allowed  Data on permitted ratio
1	2	3	4	5
1	Dicyandiamide  ELINCS No 207-312-8	Minimum 2,25  Maximum 4,5		

F.2. Urease inhibitors

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No	Type designation and composition of the urease inhibitor	Minimum and maximum inhibitor content as a percentage by mass of the total nitrogen present as urea nitrogen	EC fertiliser types for which the inhibitor may not be used	Description of urease inhibitors with which mixtures are allowed Data on permitted ratio
1	2	3	4	5
1	N-(n-butyl) thiophosphoric triamide (NBPT) ELINCS No 435-740-7	Minimum 0,09 Maximum 0,20		

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## ANNEX II

Section B of Annex IV to Regulation (EC) No 2003/2003 is amended as follows:

- (1) in the note in point 4.11. of Method 2.3.2, the second, third and fourth subparagraphs are replaced by the following:

“Titrate with 0.05 mol/l iodine (I<sub>2</sub>) solution in the presence of a starch solution as an indicator.

1 ml of iodine (I<sub>2</sub>) solution 0.05 mol/l corresponds to 0.01128 g of SnCl<sub>2</sub>·2H<sub>2</sub>O.

At least 80 % of the total tin present in the solution thus prepared must be in a bivalent form. For the titration at least 35 ml of 0.05 mol/l iodine (I<sub>2</sub>) solution must be used.”

- (2) in the note in point 4.11. of Method 2.6.1, the second, third and fourth subparagraphs are replaced by the following:

“Titrate with 0.05 mol/l iodine (I<sub>2</sub>) solution in the presence of a starch solution as an indicator.

1 ml of iodine (I<sub>2</sub>) solution 0.05 mol/l corresponds to 0.01128 g of SnCl<sub>2</sub>·2H<sub>2</sub>O.

At least 80 % of the total tin present in the solution thus prepared must be in a bivalent form. For the titration at least 35 ml of 0.05 mol/l iodine (I<sub>2</sub>) solution must be used.”