

COMMISSION REGULATION (EC) No 162/2007**of 19 February 2007****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)**

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 ⁽¹⁾, and in particular Article 31(3) thereof,

Whereas:

(1) Section E of Annex I to Regulation (EC) No 2003/2003 lists those types of inorganic micronutrient fertilisers which may be designated 'EC fertiliser' in accordance with Article 3 of that Regulation. The list includes a number of fertilisers in which the micronutrient is chemically combined with a chelating agent. A list of authorised chelating agents is provided in table E.3.1 of that Annex.

(2) The specification of the fertiliser type in which the chelated micronutrient is iron allows the use of either a single authorised chelating agent, or of a mixture of them, provided that chelated fraction can be quantified by the method described in European Standard EN 13366, and the individual chelating agents in the mixture can be separately identified and quantified by EN 13368.

(3) The provisions for iron micronutrient fertiliser containing chelated iron should be updated in three respects. First, to make clear that at least 50 % of the water-soluble iron must be chelated by the authorised chelating agents. Second, to specify that an authorised chelating agent can be mentioned on the fertiliser type designation only if it chelates at least 1 % of the water-soluble iron. Third, to generalise the reference to European Standards in order to allow the use of additional European Standards.

(4) The chemical names of the authorised chelating agents listed in section E.3.1 of Annex I to Regulation (EC) No 2003/2003 are intended to distinguish between different isomers of the same substance in a descriptive way. As there are several different nomenclatures in common use

in the scientific community for those substances, there is a risk of misidentification. In order to ensure unambiguous identification of the chelating agents, the corresponding CAS numbers (Chemical Abstracts Service of the American Chemical Society), which uniquely identify the different isomers of the chelating agents, should be provided for each entry of that Annex. It is therefore appropriate to delete three chelating agents isomers which cannot be unambiguously identified by a CAS number.

(5) A more consistent nomenclature should be used for the chelating agents, and the statement according to which authorised chelating agents must also comply with other Community legislation should be made more precise.

(6) 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 need to be adjusted in order to have correct analysis values.

(7) Regulation (EC) No 2003/2003 should therefore be amended accordingly.

(8) 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 20th day following that of its publication in the *Official Journal of the European Union*.

⁽¹⁾ OJ L 304, 21.11.2003, p. 1. Regulation as last amended by Council Regulation (EC) No 1791/2006 (OJ L 363, 20.12.2006, p. 1).

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

Done at Brussels, 19 February 2007.

For the Commission
Günter VERHEUGEN
Vice-President

ANNEX I

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

1. Table E.1.4 is replaced by the following table:

'E.1.4. Iron

No	Type designation	Data on method of production and essential ingredients	Minimum content of nutrients (percentage by weight) Data on the expression of nutrients Other requirements	Other data on the type of designation	Nutrient content to be declared Forms and solubilities of the nutrients Other criteria
1	2	3	4	5	6
4a	Iron salt	Chemically obtained product containing a mineral iron salt as its essential ingredient	12 % water-soluble Fe	The designation must include the name of the mineral anion	Water-soluble iron (Fe)
4b	Iron chelate	Water-soluble product obtained by chemical reaction of iron with chelating agent(s) mentioned in the list of Annex I section E.3.	5 % of water-soluble iron, of which the chelated fraction is at least 80 %, and at least 50 % of the water-soluble iron is chelated by the declared chelating agent(s)	Name of each one of the chelating agents mentioned in the list of Annex I section E.3.1 that chelates at least 1 % water-soluble iron	Water-soluble iron (Fe) Iron (Fe) chelated by each chelating agent that is declared in the type-designation and that can be identified and quantified by a European Standard
4c	Iron fertiliser solution	Product obtained by dissolving types 4a and/or one of the type 4b in water	2 % of water soluble Fe	The designation must include: 1. the name(s) of the mineral anion(s); 2. the name of any chelating agent, if present, that chelates at least 1 % water-soluble iron (Fe)	Water-soluble iron (Fe) Chelated iron (Fe) if present Iron (Fe) chelated by each chelating agent that is declared in the type-designation and that can be identified and quantified by a European Standard'

2. Section E.3 is replaced by the following:

E.3. *List of authorised organic chelating and complexing agents for micro-nutrients*

The following substances are authorised provided that their corresponding nutrient chelate has complied with the requirements of Council Directive 67/548/EEC (*).

E.3.1. *Chelating agents (**)*

Acids, or sodium, potassium or ammonium salts of:

			CAS number of the acid (***)
Ethylenediaminetetraacetic acid	EDTA	C ₁₀ H ₁₆ O ₈ N ₂	60-00-4
2-hydroxyethylethylenediaminetriacetic acid	HEEDTA	C ₁₀ H ₁₈ O ₇ N ₂	150-39-0
diethylenetriaminepentaacetic acid	DTPA	C ₁₄ H ₂₃ O ₁₀ N ₃	67-43-6
ethylenediamine-N,N'-di[(ortho-hydroxyphenyl)acetic acid]	[o,o] EDDHA	C ₁₈ H ₂₀ O ₆ N ₂	1170-02-1
ethylenediamine-N-[(ortho-hydroxyphenyl)acetic acid]-N'-[(para-hydroxyphenyl)acetic acid]	[o,p] EDDHA	C ₁₈ H ₂₀ O ₆ N ₂	475475-49-1
ethylenediamine-N,N'-di[(ortho-hydroxy-methylphenyl)acetic acid]	[o,o] EDDHMA	C ₂₀ H ₂₄ O ₆ N ₂	641632-90-8
ethylenediamine-N-[(ortho-hydroxy-methylphenyl)acetic acid]-N'-[(para-hydroxy-methylphenyl)acetic acid]	[o,p] EDDHMA	C ₂₀ H ₂₄ O ₆ N ₂	641633-41-2
ethylenediamine-N,N'-di[(5-carboxy-2-hydroxyphenyl)acetic acid]	EDDCHA	C ₂₀ H ₂₀ O ₁₀ N ₂	85120-53-2
ethylenediamine-N,N'-di[(2-hydroxy-5-sulfophenyl)acetic acid] and its condensation products	EDDHSA	C ₁₈ H ₂₀ O ₁₂ N ₂ S ₂ + n*(C ₁₂ H ₁₄ O ₈ N ₂ S)	57368-07-7 and 642045-40-7

E.3.2. *Complexing agents:*

List to be drawn up.

(*) OJ 196, 16.8.1967, p. 1.

(**) The chelating agents are to be identified and quantified by the European Standards that covers the mentioned chelating agents.

(***) For information only.

ANNEX II

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

1. Method 2 is amended as follows:

(a) Method 2.1 is amended as follows:

(i) points 4.2 to 4.7 are replaced by the following:

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|--|---|------------------------------|
| ‘4.2. Sulphuric acid: 0,05 mol/l | } | for variant a. |
| 4.3. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l | | |
| 4.4. Sulphuric acid: 0,1 mol/l | } | for variant b (see note 2). |
| 4.5. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l | | |
| 4.6. Sulphuric acid: 0,25 mol/l | } | for variant c (see note 2).’ |
| 4.7. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l | | |

(ii) in point 9, table 1, variant a, the second sentence is replaced by the following:

‘Sulphuric acid 0,05 mol/l to be placed in the receiving flask: 50 ml’;

(iii) in point 9, table 1, variant b, the second sentence is replaced by the following:

‘Sulphuric acid 0,1 mol/l to be placed in the receiving flask: 50 ml’;

(iv) in point 9, table 1, variant c, the second sentence is replaced by the following:

‘Sulphuric acid 0,25 mol/l to be placed in the receiving flask: 35 ml’;

(b) in Method 2.2.1, point 4.2 is replaced by the following:

‘4.2. Sulphuric acid 0,05 mol/l’;

(c) Method 2.2.2 is amended as follows:

(i) points 4.2 to 4.7 are replaced by the following:

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|--|---|---|
| ‘4.2. Sulphuric acid: 0,05 mol/l | } | for variant a. |
| 4.3. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l | | |
| 4.4. Sulphuric acid: 0,1 mol/l | } | for variant b (see note 2,
Method 2.1). |
| 4.5. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l | | |
| 4.6. Sulphuric acid: 0,25 mol/l | } | for variant c (see note 2,
Method 2.1).’ |
| 4.7. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l | | |

(ii) point 7.4 is replaced by the following:

'7.4. Control test

Before analysing, check that the apparatus is working properly and that the correct technique is applied using an aliquot part of a freshly prepared solution of sodium nitrate (4.13) containing 0,050 to 0,150 g of nitrate nitrogen depending on the variant chosen.;

(d) in Method 2.2.3, points 4.2 to 4.7 are replaced by the following:

'4.2. Sulphuric acid: 0,05 mol/l	}	for variant a.
4.3. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l		
4.4. Sulphuric acid: 0,1 mol/l	}	for variant b (see note 2, Method 2.1).
4.5. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l		
4.6. Sulphuric acid: 0,25 mol/l	}	for variant c (see note 2, Method 2.1).'
4.7. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l		

(e) in Method 2.3.1, points 4.5 to 4.10 are replaced by the following:

'4.5. Sulphuric acid: 0,05 mol/l	}	for variant a (see Method 2.1).
4.6. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l		
4.7. Sulphuric acid: 0,1 mol/l	}	for variant b (see note 2, Method 2.1).
4.8. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l		
4.9. Sulphuric acid: 0,25 mol/l	}	for variant c (see note 2, Method 2.1).'
4.10. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l		

(f) in Method 2.3.2, points 4.4 to 4.9 are replaced by the following:

'4.4. Sulphuric acid: 0,05 mol/l	}	for variant a (see Method 2.1).
4.5. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l		
4.6. Sulphuric acid: 0,1 mol/l	}	for variant b (see note 2, Method 2.1).
4.7. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l		
4.8. Sulphuric acid: 0,25 mol/l	}	for variant c (see note 2, Method 2.1).'
4.9. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l		

(g) in Method 2.3.3, points 4.3 to 4.8 are replaced by the following:

'4.3. Sulphuric acid: 0,05 mol/l	}	for variant a (see Method 2.1).
4.4. Sodium or potassium hydroxide solution, carbonate free: 0,1 mol/l		

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|--|---|--|
| 4.5. Sulphuric acid: 0,1 mol/l | } | for variant b (see note 2, Method 2.1). |
| 4.6. Sodium or potassium hydroxide solution, carbonate free: 0,2 mol/l | | |
| 4.7. Sulphuric acid: 0,25 mol/l | } | for variant c (see note 2, Method 2.1).' |
| 4.8. Sodium or potassium hydroxide solution, carbonate free: 0,5 mol/l | | |

(h) in Method 2.4, point 4.8 is replaced by the following:

'4.8. Sulphuric acid: 0,05 mol/l';

(i) Method 2.5 is amended as follows:

(i) point 4.2 is replaced by the following:

'4.2. Sulphuric acid solution, about 0,05 mol/l';

(ii) in point 7.1, the second sentence is replaced by the following:

'Make up the volumes to about 50 ml with water, add one drop of indicator (4.7) and neutralise, if necessary, with sulphuric acid 0,05 mol/l (4.2).';

(iii) point 7.3, the first paragraph is replaced by the following:

'According to the presumed biuret content, transfer 25 or 50 ml from the solution mentioned in 7.2 with a pipette, place this quantity in a 100 ml graduated flask and neutralise if necessary with a 0,05 mol/l or a 0,1 mol/l reagent (4.2 or 4.3) as required, using methyl red as an indicator and add, with the same accuracy as that used when drawing up a calibration curve, 20 ml of the alkaline solution of potassium sodium tartrate (4.4) and 20 ml of the copper solution (4.5). Make up to volume, mix thoroughly and leave standing for 15 minutes at 30 (\pm 2) °C.';

(j) Method 2.6.1 is amended as follows:

(i) point 4.8 is replaced by the following:

'4.8. Standard solution of sulphuric acid: 0,1 mol/l';

(ii) point 4.17 is replaced by the following:

'4.17. Standard sulphuric acid solution: 0,05 mol/l';

(iii) in point 7.1.1.2, the first sentence of the first paragraph is replaced by the following:

'Transfer with a precision pipette, into the receiver of the apparatus, 50 ml of a standard solution of sulphuric acid 0,1 mol/l (4.8).';

(iv) in point 7.1.1.4, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,2 mol/l, used for the blank, carried out by pipetting into the receiver of the apparatus (5.1), 50 ml of standard solution of sulphuric acid 0,1 mol/l (4.8).';

(v) in point 7.1.2.6, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,2 mol/l, used for the blank, carried out by pipetting into the receiver of the apparatus (5.1), 50 ml of standard solution of sulphuric acid 0,1 mol/l (4.8).';

(vi) in point 7.2.2.4, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,2 mol/l, used for the blank, carried out by pipetting into the receiver of the apparatus (5.1), 50 ml of standard solution of sulphuric acid 0,1 mol/l (4.8);'

(vii) in point 7.2.3.2, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,2 mol/l, used for the blank, carried out by pipetting into the receiver of the apparatus (5.1), 50 ml of standard solution of sulphuric acid 0,1 mol/l (4.8);'

(viii) in point 7.2.5.2, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,2 mol/l, used for the blank, carried out by pipetting into the receiver of the apparatus (5.1), 50 ml of standard solution of sulphuric acid 0,1 mol/l (4.8);'

(ix) in point 7.2.5.3, the first three sentences are replaced by the following:

'Transfer with a precision pipette, into the dry flask of the apparatus (5.2), an aliquot sample of the filtrate (7.2.1.1 or 7.2.1.2) containing 20 mg of ammoniacal nitrogen at the most. Then assemble the apparatus. Pipette, into the 300 ml Erlenmeyer, 50 ml of the standard sulphuric acid solution 0,05 mol/l (4.17) and enough distilled water for the level of the liquid to be approximately 5 cm above the opening of the delivery tube.'

(x) in point 7.2.5.5, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of standard solution of sodium or potassium hydroxide 0,1 mol/l, used for the blank, carried out by pipetting into the 300 ml Erlenmeyer of the apparatus (5.2), 50 ml of standard solution of sulphuric acid 0,05 mol/l (4.17);'

(k) Method 2.6.2 is amended as follows:

(i) point 4.6 is replaced by the following:

'4.6. Sulphuric acid solution 0,1 mol/l';

(ii) point 4.14 is replaced by the following:

'4.14. Titrated sulphuric acid solution: 0,05 mol/l';

(iii) in point 7.2.4, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of titrated 0,2 mol/l sodium or potassium hydroxide solution (4.8), used in the blank test, carried out by placing 50 ml of titrated 0,1 mol/l sulphuric acid solution into the receiver of the apparatus (4.6);'

(iv) in point 7.3.3, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of titrated 0,2 mol/l sodium or potassium hydroxide solution (4.8), used in the blank test, carried out by pipetting 50 ml of titrated 0,1 mol/l sulphuric acid solution (4.6) into the receiver of the apparatus;'

(v) in point 7.5.1, the third sentence of the first paragraph is replaced by the following:

'Pipette into the 300 ml Erlenmeyer exactly 50 ml of titrated 0,05 mol/l sulphuric acid solution (4.14) and an amount of distilled water so that the level of the liquid is approximately 5 cm above the opening of the intake tube.'

(vi) in point 7.5.3, the explanation of the element 'a' of the formula is replaced by the following:

'a = ml of titrated 0,1 mol/l sodium or potassium hydroxide solution (4.17), used in the blank test, carried out by pipetting into the 300 ml Erlenmeyer of the apparatus (5.2) 50 ml of titrated 0,05 mol/l sulphuric acid solution (4.14).'

2. Method 3 is amended as follows:

(a) in Method 3.1.5.1, point 4.2, the first three sentences are replaced by the following:

'Citric acid ($C_6H_8O_7 \cdot H_2O$): 173 g per litre.

Ammonia: 42 g per litre of ammoniacal nitrogen.

Sulphuric acid 0,25 mol/l

pH between 9,4 and 9,7;'

(b) in Method 3.1.5.3, point 4.1.2, the formula after the second paragraph of the Note is replaced by the following:

'1 ml of H_2SO_4 0,25 mol/l = 0,008516 g of NH_3 '.

3. Method 8 is amended as follows:

(a) in Method 8.5, point 8, the second formula is replaced by the following:

'Purity of the sulphur extracted (%) = $\frac{P_2 - P_3}{n} \times 100$;

(b) in Method 8.6, point 3 is replaced by the following:

3. Principle

Precipitation of the calcium contained in an aliquot of the extraction solution in the form of an oxalate, after separation and dissolution of the latter, by titration of oxalic acid using potassium permanganate'.
