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COUNCIL DIRECTIVE
of 18 December 1975
on the approximation of the laws of the Member States relating to fertilizers
 (76/116/EEC)
 (OJ L 24, 30.1.1976, p. 21)

Amended by:

	Official Journal		
	No	page	date
► <u>M1</u> Council Directive 88/183/EEC of 22 March 1988	L 83	33	29.3.1988
► <u>M2</u> Council Directive 89/284/EEC of 13 April 1989	L 111	34	22.4.1989
► <u>M3</u> Council Directive 89/530/EEC of 18 September 1989	L 281	116	30.9.1989
► <u>M4</u> Commission Directive 93/69/EEC of 23 July 1993	L 185	30	28.7.1993
► <u>M5</u> Commission Directive 96/28/EC of 10 May 1996	L 140	30	13.6.1996
► <u>M6</u> Directive 97/63/EC of the European Parliament and of the Council of 24 November 1997	L 335	15	6.12.1997
► <u>M7</u> Commission Directive 98/3/EC of 15 January 1998	L 18	25	23.1.1998

Amended by:

► <u>A1</u> Act of Accession of Greece	L 291	17	19.11.1979
► <u>A2</u> Act of Accession of Spain and Portugal	L 302	23	15.11.1985
► <u>A3</u> Act of Accession of Austria, Sweden and Finland	C 241	21	29.8.1994
(adapted by Council Decision 95/1/EC, Euratom, ECSC)	L 1	1	1.1.1995

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COUNCIL DIRECTIVE
of 18 December 1975

**on the approximation of the laws of the Member States relating to
fertilizers**

(76/116/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament ⁽¹⁾,

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

Whereas in each Member State fertilizers must display certain technical characteristics laid down by mandatory provisions; whereas these provisions, concerning more particularly the composition and definition of fertilizer types, the designations of these types, their identification and their packaging, differ from one Member State to another; whereas by their disparity they hinder trade within the European Economic Community;

Whereas these obstacles to the establishment and functioning of the common market can be reduced or even removed if the same provisions are adopted by all the Member States, either in addition to or in place of their present laws;

Whereas it is necessary to this end to determine at Community level the designation, definition and composition of the principal straight and compound fertilizers in the Community; whereas it should likewise be provided that fertilizers satisfying the criteria laid down by this Directive be marked 'EEC fertilizer';

Whereas Community rules on the identification and labelling of these fertilizers, and on the closure of the containers, should also be laid down;

Whereas the production of fertilizers is subject to varying degrees of fluctuation due to manufacturing techniques or basic materials; whereas, sampling and analytical procedures may also contain variations; whereas, on these accounts, it is necessary to authorize tolerances on the declared nutrient contents; whereas it is advisable, in the interest of the agricultural user, to keep these tolerances within narrow limits;

Whereas this Directive concerns only straight and compound fertilizers; whereas subsequent Directives will lay down provisions relating, *inter alia*, to liquid fertilizers, secondary elements and trace elements;

Whereas the determination of the sampling techniques and the methods of analysis, as well as any changes or additions to be made thereto in consideration of technical progress, are implementing measures of a technical nature, and whereas it is appropriate to assign their adoption to the Commission in order to simplify and speed up the procedure;

Whereas technical progress necessitates the rapid adaptation of the technical requirements defined in the various Directives relating to fertilizers; whereas, in order to facilitate the implementation of the measures required for this purpose, it is advisable to provide for a procedure establishing close cooperation between the Member States and the Commission within the Committee on the adjustment to technical progress of Directives which concern the abolition of technical barriers to trade in fertilizers,

⁽¹⁾ OJ No C 49, 28. 6. 1973, p. 42.

⁽²⁾ OJ No C 123, 27. 11. 1972, p. 34.

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HAS ADOPTED THIS DIRECTIVE:

Article 1

This Directive shall apply to products which are marketed as fertilizers and designated '►**M6** EC fertilizer ◀'.

▼M1*Article 2*

Member States shall take all the necessary measures to ensure that the designation '►**M6** EC fertilizer ◀' is used only for fertilizers belonging to one of the fertilizer types listed in Annex I and complying with the conditions laid down by this Directive and by Annexes I to III thereof.

▼B*Article 3*

Member States shall take all the necessary measures to ensure that the fertilizers referred to in Article 1 are provided with identification markings. These identification markings are listed under paragraph 1 of Annex II and the terms and conditions governing the application of these markings are set out under paragraph 2 of the same Annex.

If the fertilizers are packed, these markings must appear on the packages or labels. For containers with a quantity of fertilizer exceeding 100 kg, these markings need appear only on the accompanying documents. If the fertilizers are in bulk, these markings must appear on the accompanying documents.

In order to satisfy the requirements of Annex II, paragraph 1(b) and (c), Member States may prescribe that for fertilizers marketed in their territories, indication of the phosphorus, potassium and magnesium contents shall be expressed:

- solely in the oxide form (P_2O_5 , K_2O , MgO),
- or solely in the elemental form (P, K, Mg),
- or in both these forms simultaneously.

Where Member States exercise the option to prescribe that the phosphorus, potassium and magnesium contents be expressed in the form of elements, all references in the Annexes to the oxide form shall be expressed in elemental form and the numerical values converted using the following factors:

phosphorus pentoxide (P_2O_5) \times 0.436

= phosphorus (P);

potassium oxide (K_2O) \times 0.83

= potassium (K);

magnesium oxide (MgO) \times 0.6

= magnesium(Mg).

Member States who have exercised the said option shall make the necessary adaptations to the provisions contained in the Annexes to this Directive.

Article 4

1. Without prejudice to other Community rules, the only markings permitted on the packages, labels and accompanying documents referred to in Article 3 shall be the following indications relating to fertilizers:

- (a) the compulsory identification markings specified in paragraph 1 of Annex II;
- (b) the optional data listed in Annex I;
- (c) the manufacturer's own mark, the trade mark of the product and the trade description of the product;

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(d) the specific directions for the use, storage and handling of the fertilizer.

The indications referred to in (c) and (d) may not conflict with those referred to in (a) and (b) and must be clearly separated from them.

2. All the markings referred to in paragraph 1 must be clearly separated from any other information on the packages, labels and accompanying documents.

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3. Fluid fertilizers may be marketed only if suitable directions are provided. These directions shall cover, in particular, storage temperature and prevention of accidents during storage.

▼B*Article 5*

Member States may require that in their territory the label, the markings on the package and the accompanying documents should appear in at least their national language or languages.

Article 6

In the case of packaged fertilizers, the package must be closed in such a way or by such a device that, when it is opened, the fastening, fastening seal or the package itself is irreparably damaged.

Valve sacks may be used.

Article 7

Without prejudice to the provisions of other Community Directives, Member States may not on grounds of composition, identification, labelling or packaging, prohibit, restrict or hinder the marketing of fertilizers marked '►**M6** EC fertilizer ◀' which comply with the provisions of this Directive and the Annexes thereto.

Article 8

1. Member States shall take all the necessary measures to ensure that fertilizers marketed with the marking '►**M6** EC fertilizer ◀' are subjected to official control measures for the purpose of verifying that they comply with this Directive and with Annexes I and II thereto.

2. Compliance with this Directive and with Annexes I and II in respect of conformity to types of fertilizer and compliance with the declared nutrient content and the declared content expressed as forms and/or solubilities of such nutrients may be verified at official inspections only by means of sampling and analysis methods established in accordance with this Directive and taking into account the tolerances specified in Annex III.

3. Member States may take all the necessary measures to ensure that systematic advantage is not taken of the tolerances defined in Annex III.

Article 9

1. ►**M3** Amendments required to adapt the Annexes to technical progress shall be adopted in accordance with the procedure laid down in Article 11.

Where such amendments are made, a fertilizer shall be included only if:

- (a) it does not adversely affect human or animal health or the environment;
- (b) it provides nutrients in an effective manner according to the needs of a particular crop or according to growing conditions of particular crops. ◀

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2. Sampling and analysis methods shall likewise be determined in accordance with the said procedure.

Article 10

1. A committee (hereinafter called 'the committee'), is hereby set up to adjust to technical progress those Directives which concern the abolition of technical barriers to trade in fertilizers. It shall consist of representatives of the Member States with a representative of the Commission as chairman.
2. The committee shall adopt its rules of procedure.

Article 11

1. Where the procedure laid down in this Article is to be followed, the matter shall be referred to the committee by the chairman, either on his own initiative or at the request of a representative of a Member State.
2. The representative of the Commission shall submit to the committee a draft of the measures to be adopted. The committee shall deliver its opinion on the draft within a period of two months. Opinions shall be adopted by a majority of ► **A2** fifty-four ◀ votes, the votes of the Member States being weighted as provided in Article 148 (2) of the Treaty. The chairman shall not vote.
3. (a) Where the proposed measures are in accordance with the opinion of the committee, the Commission shall adopt them.
(b) Where the proposed measures are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall without delay propose to the Council the measures to be adopted. The Council shall act by a qualified majority.
(c) If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 12

1. Member States shall bring into force the provisions necessary to comply with this Directive within 24 months of its notification and shall forthwith inform the Commission thereof.
2. Member States shall communicate to the Commission the provisions of national law which they adopt in the field covered by this Directive.

Article 13

This Directive is addressed to the Member States.

ANNEX I

A. STRAIGHT FERTILIZERS

I. NITROGENOUS FERTILIZERS

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
1 (a)	Calcium nitrate (nitrate of lime)	Chemically obtained product containing calcium nitrate as its essential ingredient and possibly ammonium nitrate	15 % N Nitrogen expressed as total nitrogen or as nitric and ammoniacal nitrogen. Maximum content of ammoniacal nitrogen: 1.5 % N		Total nitrogen <i>Additional optional particulars:</i> Nitric nitrogen Ammoniacal nitrogen
1 (b)	Calcium magnesium nitrate (nitrate of lime and magnesium)	Chemically obtained product containing calcium nitrate and magnesium nitrate as essential ingredients	13 % N Nitrogen expressed as nitric nitrogen. Minimum content of magnesium in the form of water-soluble salts expressed as magnesium oxide: 5 % MgO		Nitric nitrogen Water-soluble magnesium oxide
1 (c)	Magnesium nitrate	Chemically obtained product containing as its essential ingredient hexahydrated magnesium nitrate	10 % N Nitrogen expressed as nitric nitrogen 14 % MgO Magnesium expressed as water-soluble magnesium oxide	When marketed in the form of crystals as note 'in crystallized form' may be added	Nitric nitrogen Water-soluble magnesium oxide
2 (a)	Sodium nitrate (nitrate of soda)	Chemically obtained product containing sodium nitrate as its essential ingredient	15 % N Nitrogen expressed as nitric nitrogen		Nitric nitrogen
2 (b)	Chile nitrate	Product prepared from caliche, containing sodium nitrate as its essential ingredient	15 % N Nitrogen expressed as nitric nitrogen		Nitric nitrogen

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
3 (a)	Calcium cyanamide	Chemically obtained product containing calcium cyanamide as its essential ingredient, calcium oxide and possibly small quantities of ammonium salts and urea	18 % N Nitrogen expressed as total nitrogen, at least 75 % of the nitrogen declared being bound in the form of cyanamide		Total nitrogen
3 (b)	Nitrogenous calcium cyanamide	Chemically obtained product containing calcium cyanamide as its essential ingredient, and calcium oxide and possibly small quantities of ammonium salts and urea, plus added nitrate	18 % N Nitrogen expressed as total nitrogen, at least 75 % of the non-nitric nitrogen declared being bound in the form of cyanamide. Nitric nitrogen content: minimum: 1 % N maximum: 3 % N		Total nitrogen Nitric nitrogen
4	Sulphate of ammonia	Chemically obtained product containing ammonium sulphate as its essential ingredient	20 % N Nitrogen expressed as ammoniacal nitrogen		Ammoniacal nitrogen
5	Ammonium nitrate or calcium ammonium nitrate	Chemically obtained product containing ammonium nitrate as its essential ingredient, which may contain fillers such as ground limestone, calcium sulphate, ground dolomite, magnesium sulphate, kieserite	20 % N Nitrogen expressed as nitric nitrogen and ammoniacal nitrogen, each of these two forms of nitrogen accounting for about half the nitrogen present	The designation 'calcium ammonium nitrate' is exclusively reserved for a fertilizer containing only calcium carbonate (limestone) and/or magnesium carbonate and calcium carbonate (dolomite) in addition to ammonium nitrate. The minimum content of these carbonates must be 20 % and their purity level at least 90 %	Total nitrogen Nitric nitrogen Ammoniacal nitrogen
6	Ammonium sulphate-nitrate	Chemically obtained product containing as essential ingredients ammonium nitrate and ammonium sulphate	25 % N Nitrogen expressed as ammoniacal and nitric nitrogen. Minimum nitric nitrogen content: 5 %		Total nitrogen Ammoniacal nitrogen Nitric nitrogen

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
7	Magnesium sulphonitrate	Chemically obtained product containing ammonium nitrate, ammonium sulphate and magnesium sulphate as essential ingredients	19 % N Nitrogen expressed as ammoniacal and nitric nitrogen. Minimum nitric nitrogen content: 6 % N 5 % MgO Magnesium in the form of water-soluble salts expressed as magnesium oxide		Total nitrogen Ammoniacal nitrogen Nitric nitrogen Water-soluble magnesium oxide
8	Magnesium ammonium nitrate	Chemically obtained product containing ammonium nitrates and magnesium compound salts (dolomite magnesium carbonate and/or magnesium sulphate) as essential ingredients	19 % N Nitrogen expressed as ammoniacal nitrogen and nitric nitrogen. Minimum nitric nitrogen content 6 % N 5 % MgO Magnesium expressed as total magnesium oxide		Total nitrogen Ammoniacal nitrogen Nitric nitrogen Total magnesium oxide and possibly, water-soluble magnesium oxide
9	Urea	Chemically obtained product containing carbonyl diamide (carbamide) as its essential ingredient	44 % N Total ureic nitrogen (including biuret). Maximum biuret content: 1.2 %		Total nitrogen, expressed as ureic nitrogen
10	Crotonylidene diurea	Product obtained by reaction of urea with crotonaldehyde Monomeric compound	28 % N Nitrogen expressed as total nitrogen At least 25 % N from the crotonylidene diurea. Maximum ureic nitrogen content: 3 %		Total nitrogen Ureic nitrogen where this is at least 1 % by weight Nitrogen from crotonylidene diurea

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
11	Isobutylidene diurea	Product obtained by reaction of urea with isobutylaldehyde Monomeric compound	28 % N Nitrogen expressed as total nitrogen At least 25 % N from isobutylidene diurea Maximum ureic nitrogen content: 3 %		Total nitrogen Ureic nitrogen where this is at least 1 % by weight Nitrogen from isobutylidene diurea
12	Urea formaldehyde	Product obtained by reaction of urea with formaldehyde and containing as its essential ingredients molecules of urea formaldehyde Polymeric compound	36 % total nitrogen Nitrogen expressed as total nitrogen At least $\frac{3}{5}$ of the declared total nitrogen content must be soluble in hot water At least 31 % N from urea formaldehyde Maximum ureic nitrogen content: 5 %		Total nitrogen Ureic nitrogen where this is at least 1 % by weight Nitrogen from formaldehyde urea that is soluble in cold water Nitrogen from formaldehyde urea that is only soluble in hot water
13	Nitrogenous fertilizer containing crotonylidene diurea	Product obtained chemically containing crotonylidene diurea and a straight nitrogen fertilizer [List A-1 in Directive 76/116/EEC, excluding products 3 (a), 3 (b) and 5]	18 % N expressed as total nitrogen At least 3 % nitrogen in ammoniacal and/or nitric and/or ureic form At least $\frac{1}{3}$ of the declared total nitrogen content must be derived from crotonylidene diurea Maximum biuret content: (ureic N + crotonylidene diurea N) \times 0,026		Total nitrogen For each form amounting to at least 1 %: nitric nitrogen ammoniacal nitrogen ureic nitrogen Nitrogen from crotonylidene diurea

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
14	Nitrogenous fertilizer containing isobutylidene diurea	Product obtained chemically containing isobutylidene diurea and a straight nitrogenous fertilizer [List A-1 in Directive 76/116/EEC, excluding products 3 (a), 3 (b) and 5]	18 % N expressed as total nitrogen At least 3 % nitrogen in ammoniacal and/or nitric and/or ureic form. At least 1/3 of the declared total nitrogen content must derive from isobutylidene diurea Maximum biuret content: (Ureic N + isobutylidene diurea N) × 0,026		Total nitrogen For each form amounting to at least 1 %: nitric nitrogen ammoniacal nitrogen ureic nitrogen Nitrogen from isobutylidene diurea
15	Nitrogenous fertilizer containing urea formaldehyde	Product obtained chemically containing urea formaldehyde and a straight nitrogenous fertilizer [List A-1 in Directive 76/116/EEC, excluding products 3 (a), 3 (b) and 5]	18 % N expressed as total nitrogen At least 3 % nitrogen in ammoniacal and/or nitric and/or ureic form At least 1/3 of the declared total nitrogen content must derive from urea formaldehyde The nitrogen from the urea formaldehyde must contain at least 3/5 nitrogen that is soluble in hot water Maximum biuret content: (Ureic N + urea formaldehyde) × 0,026		Total nitrogen For each form amounting to at least 1 %: nitric nitrogen ammoniacal nitrogen ureic nitrogen Nitrogen from urea formaldehyde Nitrogen from urea formaldehyde that is soluble in cold water Nitrogen from urea formaldehyde that is only soluble in hot water
16	Ammonium sulphate with nitrification inhibitor (dicyandiamide)	Chemically obtained product containing ammonium sulphate and dicyandiamide	20 % N Nitrogen expressed as total nitrogen Minimum ammoniacal nitrogen content: 18 % Minimum content of nitrogen from dicyandiamide: 1,5 %		Total nitrogen Ammoniacal nitrogen Nitrogen from dicyandiamide Technical information (1)

▼ **M4**

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
17	Ammonium sulphonitrate with nitrification inhibitor (dicyandiamide)	Chemically obtained product containing ammonium sulphonitrate and dicyandiamide	24 % N Nitrogen expressed as total nitrogen Minimum nitric nitrogen content: 3 % Minimum content of nitrogen from dicyandiamide: 1,5 %		Total nitrogen Nitric nitrogen Ammoniacal nitrogen Nitrogen from dicyandiamide Technical information (1)
18	Urea-ammonium sulphate	Product obtained chemically from urea and ammonium sulphate	30 % N Nitrogen expressed as ammoniacal and ureic nitrogen Minimum ammoniacal nitrogen content: 4 % Minimum sulphur content expressed as sulphur trioxide: 12 % Maximum biuret content: 0,9 %		Total nitrogen Ammoniacal nitrogen Ureic nitrogen Water-soluble sulphur trioxide

▼ **M5**▼ **M4**

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

II. PHOSPHATIC FERTILIZERS

Where a particle size criterion is prescribed for the basic constituent materials of fertilizers sold in granular form (fertilizers 1, 3, 4, 5, 6 and 7), it will be established by an appropriate analytical method.

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
1	Basic slag — Thomas phosphates — Thomas slag	Product obtained in iron-smelting by treatment of the phosphorus melts and containing calcium silicophosphates as its essential ingredients	12 % P ₂ O ₅ Phosphorus expressed as phosphorus pentoxide soluble in mineral acids, at least 75 % of the declared content of phosphorus pentoxide being soluble in 2 % citric acid; or 10 % P ₂ O ₅ Phosphorus expressed as phosphorus pentoxide soluble in 2 % citric acid Particle size: at least 75 % able to pass through a sieve with a mesh of 0.160 mm, at least 96 % able to pass through a sieve with a mesh of 0.630 mm		Total phosphorus pentoxide (soluble in mineral acids) 75 % of which (to be indicated as % by weight) is soluble in 2 % citric acid (for marketing in France and Italy) Total phosphorus pentoxide (soluble in mineral acids) and phosphorus pentoxide soluble in 2 % citric acid (for marketing in the United Kingdom) Phosphorus pentoxide soluble in 2 % citric acid (for marketing in Germany, Belgium, Denmark, Ireland, Luxembourg, the Netherlands ►A3, Austria, Finland and Sweden ◄)
2 (a)	Normal superphosphate	Product obtained by reaction of ground mineral phosphate with sulphuric acid and containing monocalcium phosphate as an essential ingredient as well as calcium sulphate	16 % P ₂ O ₅ Phosphorus expressed as P ₂ O ₅ soluble in neutral ammonium citrate, at least 93 % of the declared content of P ₂ O ₅ being water-soluble Test sample: 1 g		Phosphorus pentoxide soluble in neutral ammonium citrate Water-soluble phosphorus pentoxide
2 (b)	Concentrated superphosphate	Product obtained by reaction of ground mineral phosphate with sulphuric acid and phosphoric acid and containing monocalcium phosphate as an essential ingredient as well as calcium sulphate	25 % P ₂ O ₅ Phosphorus expressed as P ₂ O ₅ soluble in neutral ammonium citrate, at least 93 % of the declared content of P ₂ O ₅ being water-soluble Test sample: 1 g		Phosphorus pentoxide soluble in neutral ammonium citrate Water-soluble phosphorus pentoxide

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
2 (c)	Triple superphosphate	Product obtained by reaction of ground mineral phosphate with phosphoric acid and containing monocalcium phosphate as its essential ingredient	38 % P ₂ O ₅ Phosphorus expressed as P ₂ O ₅ soluble in neutral ammonium citrate, at least 93 % of the declared content of P ₂ O ₅ being water-soluble Test sample: 3 g		Phosphorus pentoxide soluble in neutral ammonium citrate Water-soluble phosphorus pentoxide
3	Partially solubilized rock phosphate	Product obtained by partial solubilization of ground rock phosphate with sulphuric acid or phosphoric acid and containing as essential ingredients monocalcium phosphate, tricalcium phosphate and calcium sulphate	20 % P ₂ O ₅ Phosphorus expressed as P ₂ O ₅ soluble in mineral acids, at least 40 % of the declared content of P ₂ O ₅ being water-soluble Particle size: — at least 90 % able to pass through a sieve with a mesh of 0.160 mm — at least 98 % able to pass through a sieve with a mesh of 0.630 mm		Total phosphorus pentoxide (soluble in mineral acids) Phosphorus pentoxide soluble in water
4	Dicalcium phosphate	Product obtained by precipitation of solubilized phosphoric acid from mineral phosphates or bones, and containing dicalcium phosphate dihydrate as its essential ingredient	38 % P ₂ O ₅ Phosphorus expressed as P ₂ O ₅ soluble in alkaline ammonium citrate (Petermann) Particle size: — at least 90 % able to pass through a sieve with a mesh of 0.160 mm — at least 98 % able to pass through a sieve with a mesh of 0.630 mm		Phosphorus pentoxide soluble in alkaline ammonium citrate

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
5	Calcined phosphate	Product obtained by heat treatment of ground rock phosphate with alkaline compounds and silicic acid, and containing alkaline calcium phosphate and calcium silicate as essential ingredients	25 % P_2O_5 Phosphorus expressed as P_2O_5 soluble in alkaline ammonium citrate (Petermann) Particle size: — at least 75 % able to pass through a sieve with a mesh of 0.160 mm — at least 96 % able to pass through a sieve with a mesh of 0.630 mm		Phosphorus pentoxide soluble in alkaline ammonium citrate
6	Aluminium-calcium phosphate	Product obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients	30 % P_2O_5 Phosphorus expressed as P_2O_5 soluble in mineral acids, at least 75 % of the declared content of P_2O_5 being soluble in alkaline ammonium citrate (Joulie) Particle size: — at least 90 % able to pass through a sieve with a mesh of 0.160 mm — at least 98 % able to pass through a sieve with a mesh of 0.630 mm		Total phosphorus pentoxide (soluble in mineral acids) Phosphorus pentoxide soluble in alkaline ammonium citrate

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
7	Soft ground rock phosphate	Product obtained by grinding soft mineral phosphates and containing tricalcium phosphate and calcium carbonate as essential ingredients	<p>25 % P_2O_5 Phosphorus expressed as P_2O_5 soluble in mineral acids, at least 55 % of the declared content of P_2O_5 being soluble in 2 % formic acid</p> <p>Particle size:</p> <ul style="list-style-type: none"> — at least 90 % able to pass through a sieve with a mesh of 0.063 mm — at least 99 % able to pass through a sieve with a mesh of 0.125 mm 		<p>Total phosphorus pentoxide (soluble in mineral acids)</p> <p>Phosphorus pentoxide soluble in 2 % formic acid</p> <p>Percentage by weight of material able to pass through a sieve with a mesh of 0.063 mm</p>

III. POTASSIC FERTILIZERS

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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
1	Kainit	Product obtained from crude potassium salts	10 % K_2O Potassium expressed as water-soluble K_2O 5 % MgO Magnesium in the form of water-soluble salts, expressed as magnesium oxide	Usual trade names may be added	Water-soluble potassium oxide Water-soluble magnesium oxide
2	Enriched kainit salt	Product obtained from crude potassium salts enriched by blending with potassium chloride	18 % K_2O Potassium expressed as water-soluble K_2O	Usual trade names may be added	Water-soluble potassium oxide Optional mention of the water-soluble magnesium oxide content where higher than 5 % MgO
3	Muriate of potash	Product obtained from crude potassium salts and containing potassium chloride as its essential ingredient	37 % K_2O Potassium expressed as water-soluble K_2O	Usual trade names may be added	Water-soluble potassium oxide
4	Potassium chloride containing magnesium salt	Product obtained from crude potassium salts with added magnesium chloride and containing potassium chloride and magnesium salts as essential ingredients	37 % K_2O Potassium expressed as water-soluble K_2O 5 % MgO Magnesium in the form of water-soluble salts, expressed as magnesium oxide		Water-soluble potassium oxide Water-soluble magnesium oxide
5	Sulphate of potash	Product obtained chemically from potassium salts and containing potassium sulphate as its essential ingredient	47 % K_2O Potassium expressed as water-soluble K_2O . Maximum chlorine content: 3 % Cl		Water-soluble potassium oxide Optional mention of the chlorine content where lower than 3 % Cl

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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 designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
1	2	3	4	5	6
6	Sulphate of potash containing magnesium salt	Product obtained chemically from potassium salts, possibly with addition of magnesium salts, and containing potassium sulphate and magnesium sulphate as essential ingredients	22 % K ₂ O Potassium expressed as water-soluble K ₂ O 8 % MgO Magnesium in the form of water-soluble salts, expressed as magnesium oxide. Maximum chlorine content: 3 % Cl	Usual trade names may be added	Water-soluble potassium oxide Water-soluble magnesium oxide Optional mention of the chlorine content where lower than 3 % Cl
7	Kieserite with potassium sulphate	Product obtained from Kieserite with potassium sulphate added	8 % MgO Magnesium expressed as water-soluble MgO 6 % K ₂ O Potassium expressed as water-soluble K ₂ O Total MgO + K ₂ O: 20 % Maximum chlorine content: 3 % Cl	Usual trade names may be added	Water-soluble magnesium oxide Water-soluble potassium oxide <i>Optional</i> mention of the chlorine content where lower than 3 % Cl

▼ M2

B. LIST OF COMPOUND FERTILIZER TYPES

1. NPK FERTILIZERS

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size		Data for identification of the fertilizers; other requirements			
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
NPK Fertilizer	Product obtained chemically or by blending, without addition of organic nutrients of animal or vegetable origin	20 % (N + P ₂ O ₅ + K ₂ O)	3 % N 5 % P ₂ O ₅ 5 % K ₂ O	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Cyanamide nitrogen	(1) Water-soluble P ₂ O ₅ (2) P ₂ O ₅ soluble in neutral ammonium citrate (3) P ₂ O ₅ soluble in neutral ammonium citrate and in water (4) P ₂ O ₅ soluble in mineral acids only (5) P ₂ O ₅ soluble in alkaline ammonium citrate (Petermann) (6a) P ₂ O ₅ soluble in mineral acids, of which at least 75 % of the declared P ₂ O ₅ content is soluble in 2 % citric acid (6b) P ₂ O ₅ soluble in 2 % citric acid (7) P ₂ O ₅ soluble in mineral acids, of which at least 75 % of the declared P ₂ O ₅ content is soluble in alkaline ammonium citrate (Joulie) (8) P ₂ O ₅ soluble in mineral acids, of which at least 55 %	Water-soluble K ₂ O	(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (5) amounts to at least 1 % by weight, it must be declared	1. An NPK fertilizer free from Thomas slag, calcined phosphate, aluminium-calcium phosphate, partially solubilized rock phosphate and soft ground rock phosphate must be declared in accordance with solubilities (1), (2) or (3): — when the water-soluble P ₂ O ₅ does not amount to 2 %, solubility (2) only shall be declared; — when the water-soluble P ₂ O ₅ is at least 2 %, solubility (3) shall be declared, and the water-soluble P ₂ O ₅ content must be indicated (solubility (1)). The P ₂ O ₅ content soluble in mineral acids only must not exceed 2 %. For this type 1, the test sample for determining solubilities (2) and (3) shall be 1 g. 2(a). An NPK fertilizer containing soft ground rock phosphate or partially solubilized rock phosphate must be free from Thomas slag, calcined phosphate and aluminium-calcium phosphate. It shall be declared in accordance with solubilities (1), (3) and (4). This type of fertilizer must contain: — at least 2 % P ₂ O ₅ soluble in mineral acids only (solubility (4));	(1) Water-soluble potassium oxide (2) The indication 'low in chlorine' is linked to a maximum content of 2 % Cl (3) Chlorine content may be declared



Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
					of the declared P ₂ O ₅ content is soluble in 2 % formic acid			— at least 5 % P ₂ O ₅ soluble in water and neutral ammonium citrate (solubility (3)); — at least 2.5 % water-soluble P ₂ O ₅ (solubility (1)). This type of fertilizer must be marketed under the designation 'NPK fertilizer containing soft ground rock phosphate' or 'NPK fertilizer containing partially solubilized rock phosphate'. For this type 2 (a), the test sample for determining solubility (3) shall be 3 g. 2. (b) An NPK fertilizer containing aluminium-calcium phosphate must be free from Thomas slag, calcined phosphate, soft ground rock phosphate and partially solubilized rock phosphate. It shall be declared in accordance with solubilities (1) and (7), the latter applying after deduction of the solubility in water. This type of fertilizer must contain: — at least 2 % of water-soluble P ₂ O ₅ (solubility (1)); — at least 5 % of P ₂ O ₅ according to solubility (7). This type of fertilizer must be marketed under the designation 'NPK fertilizer containing aluminium-calcium phosphate'. 3. In the case of NPK fertilizers containing only one of the following types of phosphatic fertilizer: Thomas	

Particle size of the basic phosphatic ingredients:

- Thomas slag: at least 75 % able to pass through a sieve with a mesh of 0-160 mm
- Aluminium-calcium phosphate: at least 90 % able to pass through a sieve with a mesh of 0-160 mm
- Calcined phosphate: at least 75 % able to pass through a sieve with a mesh of 0-160 mm
- Soft ground rock phosphate: at least 90 % able to pass through a sieve with a mesh of 0-063 mm
- Partially solubilized rock phosphate: at least 90 % able to pass through a sieve with a mesh of 0-160 mm

▼ B

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
NPK fertilizer containing crotonylidene diurea or isobutylidene diurea or urea formaldehyde (as appro-	Product obtained chemically without addition of organic nutrients of animal or vegetable origin and containing crotonylidene diurea or isobutylidene	20 % (N + P ₂ O ₅ + K ₂ O)	5 % N At least ¼ of the declared content of total nitrogen must derive from nitrogen form (5) or (6) or	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Nitrogen from	(1) Water-soluble P ₂ O ₅ (2) P ₂ O ₅ soluble in neutral ammonium citrate (3) P ₂ O ₅ soluble in neutral ammonium citrate and in water	Water-soluble K ₂ O	(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (4) amounts to at least 1 % by weight, it must be declared	An NPK fertilizer free from Thomas slag, calcined phosphate, aluminium-calcium phosphate, partially solubilized natural phosphate and natural phosphate must be declared in accordance with solubilities (1), (2) or (3): — when the water-soluble P ₂ O ₅ does not amount to 2 %, solubility (2) only shall be declared, — when the water-soluble P ₂ O ₅ is at least 2 %, solubility (3) shall be declared, and the water-soluble P ₂ O ₅ content must be indicated [solubility (1)].	(1) Water-soluble potassium oxide (2) The indication 'low in chlorine' is linked to a maximum content of 2 % Cl (3) Chlorine

▼ M4

▼ M4

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
appropriate)	diurea or urea formaldehyde		(7). At least 3/5 of the declared nitrogen content (7) must be soluble in hot water 5 % P ₂ O ₅ 5 % K ₂ O	(6) Nitrogen from isobutylidene diurea (7) Nitrogen from urea formaldehyde (8) Nitrogen from urea formaldehyde that is only soluble in hot water (9) Nitrogen from urea formaldehyde that is soluble in cold water			(3) One of the forms of nitrogen (5) to (7) (as appropriate) Nitrogen form (7) must be declared in the form of nitrogen (8) and (9)	The P ₂ O ₅ content soluble in mineral acids only must not exceed 2 %. The test sample for determining solubilities (2) and (3) shall be 1 g.	content may be declared.

2. NP FERTILIZERS

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size		Data for identification of the fertilizers; other requirements			
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
NP fertilizer	Product obtained chemically or by blending without addition of organic nutrients of animal or vegetable origin	18 % (N + P ₂ O ₅)	3 % N 5 % P ₂ O ₅	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Cyanamide nitrogen	(1) Water-soluble P ₂ O ₅ (2) P ₂ O ₅ soluble in neutral ammonium citrate (3) P ₂ O ₅ soluble in neutral ammonium citrate and in water (4) P ₂ O ₅ soluble in mineral acids only (5) P ₂ O ₅ soluble in alkaline ammonium citrate (Petermann) (6a) P ₂ O ₅ soluble in mineral acids of which at least 75 % of the declared P ₂ O ₅ content is soluble in 2 % citric acid (6b) P ₂ O ₅ soluble in 2 % citric acid (7) P ₂ O ₅ soluble in mineral acids of which at least 75 % of the declared P ₂ O ₅ content is soluble in alkaline ammonium citrate (Joulie) (8) P ₂ O ₅ soluble in mineral acids of which at least 55 % of the declared P ₂ O ₅ content is soluble in		(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (5) amounts to at least 1 % by weight, it must be declared	1. An NP fertilizer free from Thomas slag, calcined phosphate, aluminium-calcium phosphate, partially solubilized rock phosphate and soft ground rock phosphate must be declared in accordance with solubilities (1), (2) or (3): — when the water-soluble P ₂ O ₅ does not amount to 2 %, solubility (2) only shall be declared; — when the water-soluble P ₂ O ₅ is at least 2 %, solubility (3) shall be declared, and the water-soluble P ₂ O ₅ content must be indicated (solubility (1)). The P ₂ O ₅ content soluble in mineral acids only must not exceed 2 %. For this type 1, the test sample for determining solubilities (2) and (3) shall be 1 g. 2(a). An NP fertilizer containing soft ground rock phosphate or partially solubilized rock phosphate must be free from Thomas slag, calcined phosphate and aluminium-calcium phosphate. It shall be declared in accordance with solubilities (1), (3) and (4). This type of fertilizer must contain: — at least 2 % P ₂ O ₅ soluble in mineral acids only (solubility (4)); — at least 5 % P ₂ O ₅ soluble in water and neutral ammonium citrate	K ₂ O



Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
					2 % formic acid			(solubility (3)); — at least 2.5 % water-soluble P ₂ O ₅ (solubility (1)). This type of fertilizer must be marketed under the designation 'NP fertilizer containing soft ground rock phosphate' or 'NP fertilizer containing partially solubilized rock phosphate'. For this type 2 (a), the test sample for determining solubility (3) shall be 3 g. 2(b). An NP fertilizer containing aluminium-calcium phosphate, must be free from Thomas slag, calcined phosphate, soft ground rock phosphate and partially solubilized rock phosphate. It shall be declared in accordance with solubilities (1) and (7), the latter applying after deduction of the solubility in water. This type of fertilizer must contain: — at least 2 % water-soluble P ₂ O ₅ (solubility (1)); — at least 5 % P ₂ O ₅ according to solubility (7). This type of fertilizer must be marketed under the designation 'NP fertilizer containing aluminium-calcium phosphate'. 3. In the case of NP fertilizers containing only one of the following types of phosphatic fertilizer: Thomas slag, calcined phosphate, aluminium-calcium	

Particle size of the basic phosphatic ingredients:

- Thomas slag: at least 75 % able to pass through a sieve with a mesh of 0.160 mm
- Aluminium-calcium phosphate: at least 90 % able to pass through a sieve with a mesh of 0.160 mm
- Calcined phosphate: at least 75 % able to pass through a sieve with a mesh of 0.160 mm
- Soft ground rock phosphate: At least 90 % able to pass through a sieve with a mesh of 0.063 mm
- Partially solubilized rock phosphate: at least 90 % able to pass through a sieve with a mesh of 0.160 mm

▼ B

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
NP fertilizer containing crotonylidene diurea or isobutylidene diurea or urea formaldehyde (as appropriate)	Product obtained chemically without addition of organic nutrients of animal or vegetable origin and containing crotonylidene diurea or isobutylidene diurea or urea formaldehyde	18 % (N + P ₂ O ₅)	5 % N At least ¼ of the declared content of total nitrogen must derive from nitrogen form (5) or (6) or (7).	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Nitrogen from crotonylidene	(1) Water-soluble P ₂ O ₅ (2) P ₂ O ₅ soluble in neutral ammonium citrate (3) P ₂ O ₅ soluble in neutral ammonium citrate and in water		(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (4) amounts to at least 1 % by weight, it must be declared (3) One of	An NP fertilizer free from Thomas slag, calcined phosphate, aluminium-calcium phosphate, partially solubilized natural phosphate and natural phosphate must be declared in accordance with solubilities (1), (2) or (3): — when the water-soluble P ₂ O ₅ does not amount to 2 %, solubility (2) only shall be declared, — when the water-soluble P ₂ O ₅ is at least 2 %, solubility (3) shall be declared, and the water-soluble P ₂ O ₅ content must be indicated [solubility (1)]. The P ₂ O ₅ content soluble in mineral acids only must not exceed 2 %.	phosphate, soft ground rock phosphate, the type designation must be followed by an indication of the phosphate ingredient. The declaration of the solubility of the P ₂ O ₅ must be given in accordance with the following solubilities: — for fertilizers based on Thomas slag: solubility (6a) (France, Italy), (6b) (Germany, Belgium, Denmark, Ireland, Luxembourg, Netherlands, United Kingdom ►A3, Austria, Finland, Sweden ◄); — for fertilizers based on calcined phosphate: solubility (5); — for fertilizers based on aluminium-calcium phosphate: solubility (7); — for fertilizers based on soft ground rock phosphate: solubility (8).

▼ M4

▼ M4

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
			At least 3/5 of the declared nitrogen content (7) must be soluble in hot water 5 % P ₂ O ₅	diurea (6) Nitrogen from isobutylidene diurea (7) Nitrogen from urea formaldehyde (8) Nitrogen from urea formaldehyde that is only soluble in hot water (9) Nitrogen from urea formaldehyde that is soluble in cold water			the forms of nitrogen (5) to (7) (as appropriate) Nitrogen form (7) must be declared in the form of nitrogen (8) and (9)		The test sample for determining solubilities (2) and (3) shall be 1 g.

3. NK FERTILIZERS

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
NK fertilizer	Product obtained chemically or by blending, without addition of organic nutrients of animal or vegetable origin	18 % (N + K ₂ O)	3 % N 5 % K ₂ O	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Cyanamide nitrogen		Water-soluble K ₂ O	(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (5) amounts to at least 1 % by weight, it must be declared		(1) Water-soluble potassium oxide (2) The indication 'low in chlorine' is linked to a maximum content of 2 % Cl (3) Chlorine content may be declared
NK fertilizer containing crotonylidene diurea or isobutylidene diurea or urea formaldehyde (as appropriate)	Product obtained chemically without addition of organic nutrients of animal or vegetable origin and containing crotonylidene diurea or isobutylidene diurea or urea formaldehyde	18 % (N + K ₂ O)	5 % N At least ¼ of the declared content of total nitrogen must derive from nitrogen form (5) or (6) or (7). At least ⅓ of the declared nitrogen content	(1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Nitrogen from crotonylidene diurea (6) Nitrogen from isobutylidene diurea		Water-soluble K ₂ O	(1) Total nitrogen (2) If any of the forms of nitrogen (2) to (4) amounts to at least 1 % by weight, it must be declared (3) One of the forms of nitrogen (5) to (7) (as appropriate)		(1) Water-soluble potassium oxide (2) The indication 'low in chlorine' is linked to a maximum content of 2 % Cl (3) Chlorine content may be declared

▼ M4

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
			(7) must be soluble in hot water 5 % K ₂ O	dene diurea (7) Nitrogen from urea formaldehyde (8) Nitrogen from urea formaldehyde that is only soluble in hot water (9) Nitrogen from urea formaldehyde that is soluble in cold water			Nitrogen form (7) must be declared in the form of nitrogen (8) and (9)		

4. PK FERTILIZERS

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements			
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	
1	2	3	4	5	6	7	8	9	10	
PK fertilizer	Product obtained chemically or by blending, without addition of organic nutrients of animal or vegetable origin	18 % (P ₂ O ₅ + K ₂ O)	5 % P ₂ O ₅ 5 % K ₂ O		(1) Water-soluble P ₂ O ₅ (2) P ₂ O ₅ soluble in neutral ammonium citrate (3) P ₂ O ₅ soluble in neutral ammonium citrate and in water (4) P ₂ O ₅ soluble in mineral acids only (5) P ₂ O ₅ soluble in alkaline ammonium citrate (Petermann) (6a) P ₂ O ₅ soluble in mineral acids of which at least 75 % of the declared P ₂ O ₅ content is soluble in 2 % citric acid (6b) P ₂ O ₅ soluble in 2 % citric acid (7) P ₂ O ₅ soluble in mineral acids of which at least 75 % of the declared P ₂ O ₅ content is soluble in alkaline ammonium citrate (Joulié) (8) P ₂ O ₅ soluble in mineral acids, of which at least 55 % of the declared P ₂ O ₅ content is soluble in	Water-soluble K ₂ O		1. A PK fertilizer free from Thomas slag, calcined phosphate, aluminium-calcium phosphate, partially solubilized rock phosphate and soft ground rock phosphate must be declared in accordance with solubilities (1), (2) or (3): — when the water-soluble P ₂ O ₅ does not amount to 2 % solubility (2) only shall be declared; — when the water-soluble P ₂ O ₅ is at least 2 % solubility (3) shall be declared and the water-soluble P ₂ O ₅ content must be indicated (solubility (1)). The P ₂ O ₅ content soluble in mineral acids only must not exceed 2 %. For this type 1, the test sample for determining solubilities (2) and (3) shall be 1 g. 2(a). A PK fertilizer containing soft ground rock phosphate or partially solubilized rock phosphate must be free from Thomas slag, calcined phosphate and aluminium-calcium phosphate. It shall be declared in accordance with solubilities (1) (3) and (4). This type of fertilizer must contain: — at least 2 % P ₂ O ₅ soluble in mineral acids only (solubility (4)); — at least 5 % P ₂ O ₅ soluble in water and neutral ammonium citrate		(1) Water-soluble potassium oxide (2) The indication 'low in chlorine' is linked to a maximum content of 2 % Cl (3) Chlorine content may be declared

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
					2 % formic acid				
					<p><i>Particle size of the basic phosphatic ingredients:</i></p> <p>Thomas slag: at least 75 % able to pass through a sieve with a mesh of 0-160 mm</p> <p>Aluminium-calcium phosphate: at least 90 % able to pass through a sieve with a mesh of 0-160 mm</p> <p>Calcined phosphate: at least 75 % able to pass through a sieve with a mesh of 0-160 mm</p> <p>Soft ground rock phosphate: at least 90 % able to pass through a sieve with a mesh of 0-063 mm</p> <p>Partially solubilized rock phosphate: at least 90 % able to pass through a sieve with a mesh of 0-160 mm</p>				
								<p>(solubility (3));</p> <p>— at least 2.5% water-soluble P₂O₅ (solubility (1)).</p> <p>This type of fertilizer must be marketed under the designation 'PK fertilizer containing soft ground rock phosphate' or 'PK fertilizer containing partially solubilized rock phosphate'.</p> <p>For this type 2(a), the test sample for determining solubility (3) shall be 3 g.</p> <p>2(b). A PK fertilizer containing aluminium-calcium phosphate must be free from Thomas slag, calcined phosphate and partially solubilized rock phosphate.</p> <p>It shall be declared in accordance with solubilities (1) and (7), the latter applying after deduction of the solubility in water.</p> <p>This type of fertilizer must contain:</p> <p>— at least 2 % water-soluble P₂O₅ (solubility (1));</p> <p>— at least 5 % P₂O₅ according to solubility (7).</p> <p>This type of fertilizer must be marketed under the designation 'PK fertilizer containing aluminium-calcium phosphate'.</p> <p>3. In the case of PK fertilizers containing only one of the following types of phosphatic fertilizer: Thomas slag, calcined phosphate, aluminium-calcium phosphate, soft ground rock phosphate,</p>	

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight)		Forms, solubilities and nutrient contents, to be declared as specified in columns 8, 9 and 10; particle size			Data for identification of the fertilizers; other requirements		
		Total	For each of the nutrients	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
1	2	3	4	5	6	7	8	9	10
								<p>the type designation must be followed by an indication of the phosphate ingredient.</p> <p>The declaration of the solubility of the P₂O₅ must be given in accordance with the following solubilities:</p> <ul style="list-style-type: none"> — for fertilizers based on Thomas slag: solubility (6a) (France, Italy), (6b) (Germany, Belgium, Denmark, Ireland, Luxembourg, Netherlands, United Kingdom ▶ A3, Austria, Finland, Sweden ◀); — for fertilizers based on calcined phosphate: solubility (5); — for fertilizers based on aluminium-calcium phosphate: solubility (7); — for fertilizers based on soft ground rock phosphate: solubility (8). 	

C. FLUID FERTILIZERS

1. STRAIGHT FLUID FERTILIZERS

Number	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 or type designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
(1)	(2)	(3)	(4)	(5)	(6)
1	Nitrogen fertilizer solution	Product obtained chemically and by dissolution in water, in a form stable at atmospheric pressure, without addition of organic nutrients of animal or vegetable origin	15 % N Nitrogen expressed as total nitrogen or, if there is only one form, nitric nitrogen or ammoniacal nitrogen or ureic nitrogen. Maximum biuret content: ureic N \times 0,026		Total nitrogen and, for any form that amounts to not less than 1 %, nitric nitrogen, ammoniacal nitrogen and/or ureic nitrogen. If the biuret content is less than 0,2 %, the words 'low in biuret' may be added
2	Ammonium nitrate-urea fertilizer solution	Product obtained chemically and by dissolution in water, containing ammonium nitrate and urea	26 % N Nitrogen expressed as total nitrogen, where the ureic nitrogen accounts for about half of the nitrogen present Maximum biuret content: 0,5 %		Total nitrogen Nitric nitrogen, ammoniacal nitrogen and ureic nitrogen. If the biuret content is less than 0,2 %, the words 'low in biuret' may be added
3	Calcium nitrate solution	Product obtained by dissolving calcium nitrate in water	8 % N Nitrogen expressed as nitrogen in nitric form with a maximum 1 % nitrogen as ammonia	The type designation may be followed, as appropriate, by one of the following indications: — for foliar application — for making nutrient solutions — for ferti-irrigation	Total nitrogen <i>Optionally:</i> — nitrogen in nitric form — nitrogen as ammonia — calcium in the case of one of the uses stipulated in column 5
4	Magnesium nitrate solution	Product obtained chemically and by dissolving magnesium nitrate in water	6 % N Nitrogen expressed as nitric nitrogen 9 % MgO Magnesium expressed as water-soluble magnesium oxide Minimum pH: 4		Nitric nitrogen Water-soluble magnesium oxide

Number	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 or type designation	Nutrient content to be declared; forms and solubilities of the nutrients; other criteria
(1)	(2)	(3)	(4)	(5)	(6)
5	Calcium nitrate suspension	Product obtained by suspension of calcium nitrate in water	8 % N Nitrogen expressed as total nitrogen or as nitric and ammoniacal nitrogen Maximum content of ammoniacal nitrogen: 1,0 % 14 % CaO Calcium expressed as water-soluble CaO	The type designation may be followed by one of the following indications: — for foliar application — for making nutrient solutions and suspensions — for fertigation	Total nitrogen Nitric nitrogen Calcium oxide soluble in water
6	Nitrogen fertiliser solution with urea formaldehyde	Product obtained chemically or by dissolution in water of urea formaldehyde and a nitrogenous fertiliser from list A-1 in Directive 76/116/EEC, excluding products 3(a), 3(b) and 5	18 % N expressed as total nitrogen At least one third of the declared total nitrogen content must derive from urea formaldehyde Maximum biuret content: (ureic N + urea formaldehyde N) × 0,026		Total nitrogen For each form amounting to at least 1 %: — Nitric nitrogen — Ammoniacal nitrogen — Ureic nitrogen Nitrogen from urea formaldehyde
7	Nitrogen fertiliser suspension with urea formaldehyde	Product obtained chemically or by suspension in water of urea formaldehyde and a nitrogenous fertiliser from list A-1 in Directive 76/116/EEC, excluding products 3(a), 3(b) and 5	18 % N expressed as total nitrogen At least one third of the declared total nitrogen content must derive from urea formaldehyde of which at least three fifths has to be soluble in hot water Maximum biuret content: (ureic N + urea formaldehyde N) × 0,026		Total nitrogen For each form amounting to at least 1 %: — Nitric nitrogen — Ammoniacal nitrogen — Ureic nitrogen Nitrogen from urea formaldehyde Nitrogen from urea formaldehyde that is soluble in cold water Nitrogen from urea formaldehyde that is only soluble in hot water

▼ M4

▼ M7

2. COMPOUND FLUID FERTILIZERS

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight) Other requirements		Form, solubility and nutrient content to be declared as specified in columns 8, 9 and 10			Data for identifying fertilizers Other requirements		
		Total	For each nutrient	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
NPK-fertilizer solution	Product obtained chemically and by dissolution in water, in a form stable at atmospheric pressure, without addition of organic nutrients of animal or vegetable origin	15 % (N + P ₂ O ₅ + K ₂ O) 2 % N 3 % P ₂ O ₅ 3 % K ₂ O Maximum biuret content: ureic N × 0,026	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	Water-soluble P ₂ O ₅	Water-soluble K ₂ O	1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	Water-soluble P ₂ O ₅	1. Water-soluble potassium oxide 2. The words 'low in chlorine' may be used only where the Cl content does not exceed 2 % 3. The chlorine content may be declared	
NPK fertilizer suspension	Product in liquid form, in which the nutrients are derived from, substances both in suspension in the water and in solution without addition of organic nutrients of animal or vegetable origin	20 % (N + P ₂ O ₅ + K ₂ O) 3 % N 4 % P ₂ O ₅ 4 % K ₂ O Maximum biuret content: ureic N × 0,026	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	1. Water-soluble P ₂ O ₅ 2. P ₂ O ₅ soluble in neutral ammonium citrate 3. P ₂ O ₅ soluble in neutral ammonium citrate and water	Water-soluble K ₂ O	1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	The fertilizers must not contain Thomas slag, aluminium calcium phosphate, calcined phosphates, partially solubilized phosphates or natural phosphates 1. If the water-soluble P ₂ O ₅ is less than 2 %, only solubility 2 shall be declared 2. If the water-soluble P ₂ O ₅ is at least 2 %, solubility 3 and the water-soluble P ₂ O ₅ content shall be declared	1. Water-soluble potassium oxide 2. The words 'low in chlorine' may be used only where the Cl content does not exceed 2 % 3. The chlorine content may be declared	



MI

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight) Other requirements		Form, solubility and nutrient content to be declared as specified in columns 8, 9 and 10			Data for identifying fertilizers Other requirements		
		Total	For each nutrient	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
NP fertilizer solution	Product obtained chemically and by dissolution in water, in a form stable at atmospheric pressure, without addition of organic nutrients of animal or vegetable origin	18 % (N + P ₂ O ₅) Maximum biuret content: ureic N × 0,026 %	3 % N 5 % P ₂ O ₅	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	Water-soluble P ₂ O ₅		1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared. If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	Water-soluble P ₂ O ₅	
NP fertilizer suspension	Product in liquid form, in which the nutrients are derived from substances both in solution and in suspension in the water, without addition of organic nutrients of animal or vegetable origin	18 % (N + P ₂ O ₅) Maximum biuret content: ureic N × 0,026 %	3 % N 5 % P ₂ O ₅	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	1. Water soluble P ₂ O ₅ 2. P ₂ O ₅ soluble in neutral ammonium citrate 3. P ₂ O ₅ soluble in neutral ammonium citrate and water		1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared. If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	1. If the water-soluble P ₂ O ₅ is less than 2 % only solubility 2 will be declared 2. If the water-soluble P ₂ O ₅ is at least 2 %, solubility 3 will be declared and the water-soluble P ₂ O ₅ content must be stated The fertilizers may not contain Thomas slag, aluminium calcium phosphate, calcined phosphates, partially solubilized phosphate or natural phosphates	



MI

Type designation	Data on method of production	Minimum content of nutrients (percentage by weight) Other requirements		Form, solubility and nutrient content to be declared as specified in columns 8, 9 and 10				Data for identifying fertilizers Other requirements	
		Total	For each nutrient	N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
NK fertilizer solution	Product obtained chemically and by dissolution in water, in a form stable at atmospheric pressure, without addition of organic nutrients of animal or vegetable origin	15 % (N + K ₂ O) Maximum biuret content: ureic N × 0,026	3 % N 5 % K ₂ O	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	Water-soluble P ₂ O ₅	Water-soluble K ₂ O	1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	Water-soluble P ₂ O ₅	1. Water-soluble potassium oxide 2. The words 'low in chlorine' may be used only where the Cl content does not exceed 2 % 3. The chlorine content may be declared
NK fertilizer suspension	Product in liquid form, in which the nutrients are derived from substances both in solution and in suspension in the water, without addition of organic nutrients of animal or vegetable origin	18 % (N + K ₂ O) Maximum biuret content: ureic N × 0,026	3 % N 5 % K ₂ O	1. Total nitrogen 2. Nitric nitrogen 3. Ammoniacal nitrogen 4. Ureic nitrogen	Water-soluble P ₂ O ₅	Water-soluble K ₂ O	1. Total nitrogen 2. If any of the forms of nitrogen 2 to 4 amounts to not less than 1 % by weight, it must be declared If the biuret content is less than 0,2 %, the words 'low in biuret' may be added	Water-soluble P ₂ O ₅	1. Water-soluble potassium oxide 2. The words 'low in chlorine' may be used only where the Cl content does not exceed 2 % 3. The chlorine content may be declared
PK fertilizer solution	Product obtained chemically and by dissolution in water, without addition of organic nutrients of animal or vegetable origin	18 % (P ₂ O ₅ + K ₂ O)	5 % P ₂ O ₅ 5 % K ₂ O		Water-soluble P ₂ O ₅	Water-soluble K ₂ O		Water-soluble P ₂ O ₅	1. Water-soluble potassium oxide 2. The words 'low in chlorine' may be used only where the Cl content does not exceed 2 % 3. The chlorine content may be declared

D. SECONDARY NUTRIENT FERTILIZERS
LIST OF FERTILIZERS CONTAINING MAINLY CALCIUM, MAGNESIUM OR SULPHUR AS NUTRIENTS

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 designation	Nutrient content to be declared Solubilities of the nutrients Other criteria
1	2	3	4	5	6
1	Calcium sulphate	Product of natural or industrial origin containing calcium sulphate at various degrees of hydration	25 % CaO 35 % SO ₃ Calcium and sulphur expressed as total CaO + SO ₃ Fineness of grind: — at least 80 % to pass through a sieve with a 2 mm mesh width, — at least 99 % to pass through a sieve with a 10 mm mesh width	Usual trade names may be added	Total sulphur trioxide <i>Optional:</i> total CaO
2	Calcium chloride solution	Calcium chloride solution of industrial origin	12 % CaO Calcium expressed as water-soluble CaO		Calcium oxide <i>Optional:</i> for plant spraying
3	Elemental sulphur	Comparatively refined natural or industrial product	98 % S (245 % SO ₃) Sulphur expressed as total SO ₃		Total sulphur trioxide
4	Kieserite	Product of mineral origin containing monohydrated magnesium sulphate as main component	24 % MgO 45 % SO ₃ Magnesium and sulphur expressed as water-soluble magnesium oxide and sulphur trioxide	Usual trade names may be added	Water soluble magnesium oxide <i>Optional:</i> water-soluble sulphur trioxide
5	Magnesium sulphate	Product containing heptahydrated magnesium sulphate as main component	15 % MgO 28 % SO ₃ Magnesium and sulphur expressed as water-soluble magnesium oxide and sulphur trioxide	Usual trade names may be added	Water-soluble magnesium oxide <i>Optional:</i> water-soluble sulphur trioxide

▼ M4

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 designation	Nutrient content to be declared Solubilities of the nutrients Other criteria
1	2	3	4	5	6
5.1	Magnesium sulphate solution	Product obtained by dissolution in water of magnesium sulphate of industrial origin	5 % MgO 10 % SO ₃ Magnesium and sulphur expressed as water-soluble magnesium oxide and water-soluble sulphuric anhydride	Usual trade names may be added	Water-soluble magnesium oxide Optionally: water-soluble sulphuric anhydride
5.2	Magnesium hydroxide	Product obtained chemically and having as its essential ingredient magnesium hydroxide	60 % MgO Particle size: at least 99 % able to pass through a sieve with a mesh of 0,063 mm		Total magnesium oxide
5.3	Suspension of magnesium hydroxide	Product obtained by suspension of type 5.2	24 % MgO		Total magnesium oxide
6	Magnesium chloride solution	Product obtained by dissolving magnesium chloride of industrial origin	13 % MgO Magnesium expressed as magnesium oxide Maximum calcium content: 3 % CaO		Magnesium oxide

▼ M5▼ M4

E. TRACE ELEMENT FERTILIZERS

Explanatory note: The following notes are applicable to the whole of part E.

Note 1: A chelating agent may be designated by means of its initials as set out in Chapter E.

Note 2: If the product leaves no solid residue after being dissolved in water it may be described as 'for dissolution'.

Note 3: Where a trace element is present in a chelated form, the pH range guaranteeing acceptable stability of the chelated fraction shall be stated.

CHAPTER A

FERTILIZERS CONTAINING ONLY ONE TRACE ELEMENT

Number	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
BORON					
1a	Boric acid	Product obtained by the action of an acid on a borate	14 % water-soluble B	The usual trade names may be added.	Water-soluble boron (B)
1b	Sodium borate	Chemically obtained product containing as its essential component a sodium borate	10 % water-soluble B	The usual trade names may be added.	Water-soluble boron (B)
1c	Calcium borate	Product obtained from colemanite or pandermite containing as its essential ingredient calcium borates	7 % total B Particle size: at least 98 % passing through a 0,063 mm sieve	The usual trade names may be added.	Total boron (B)
1d	Boron ethanol amine	Product obtained by reacting a boric acid with an ethanol amine	8 % water-soluble B		Water-soluble boron (B)
1e	Borated fertilizer in solution	Product obtained by dissolving types 1a and/or 1b and/or 1d	2 % water-soluble B	The designation must include the names of the constituents present	Water-soluble boron (B)
1f	Borated fertilizer in suspension	Product obtained by suspending types 1a and/or 1b and/or 1d in water	2 % water-soluble B	The designation must include the names of the constituents present	Water-soluble boron (B)



M4

Number	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

COBALT

2a	Cobalt salt	Chemically obtained product containing a mineral salt of cobalt as its essential ingredient	19 % water-soluble Co	The designation must include the name of the mineral anion	Water-soluble cobalt (Co)
2b	Cobalt chelate	Water-soluble product obtained by combining cobalt chemically with a chelating agent	2 % water-soluble Co, at least 8/10 of the declared value of which has been chelated	Name of the chelating agent	Water-soluble cobalt (Co) Chelated cobalt (Co)
2c	Cobalt fertilizer solution	Product obtained by dissolving types 2a and/or one of the type 2b in water	2 % water-soluble Co	The designation must include: (a) the name(s) of the mineral anion(s); (b) the name of any chelating agent if present.	Water-soluble cobalt (Co). Chelated cobalt (Co) if present

COPPER

3a	Copper salt	Chemically obtained product containing a mineral salt of copper as its essential ingredient	20 % water-soluble Cu	The designation must include the name of the mineral anion	Water-soluble copper (Cu)
3b	Copper oxide	Chemically obtained product containing copper oxide as its essential ingredient	70 % total Cu Particle size: at least 98 % passing through a 0,063 mm sieve		Total copper (Cu)
3c	Copper hydroxide	Chemically obtained product containing copper hydroxide as its essential ingredient	45 % total Cu Particle size: at least 98 % passing through a 0,063 mm sieve		Total copper (Cu)
3d	Copper chelate	Water-soluble product obtained by combining copper chemically with a chelating agent	9 % water-soluble Cu, at least 8/10 of the declared value of which has been chelated	Name of the chelating agent	Water-soluble copper (Cu). Chelated copper (Cu)



M4

Number	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
3e	Copper-based fertilizer	Product obtained by mixing types 3a and/or 3b and/or 3c and/or a single one of type 3d and, if required, filler that is neither nutrient nor toxic	5 % total Cu	The designation must include: (a) the name(s) of the copper components; (b) the name of any chelating agent if present.	Total copper (Cu) Water-soluble copper (Cu) if this accounts for at least of the total copper Chelated cobalt (Co) if present
3f	Copper fertilizer solution	Product obtained by dissolving types 3a and/or 3d in water	3 % water-soluble Cu	The designation must include: (a) the name(s) of the mineral anion(s); (b) the name of any chelating agent if present.	Water-soluble cobalt (Co) Chelated cobalt (Co) if present
3g	Copper oxychloride	Chemically-obtained product containing copper oxychloride $[\text{Cu}_2\text{Cl}(\text{OH})_3]$ as an essential ingredient	50 % total Cu Particle size: at least 98 % passing through a 0,063 mm sieve		Total copper (Cu)
3h	Copper oxychloride suspension	Product obtained by suspension of type 3g	17 % total Cu		Total copper (Cu)
IRON					
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 combining iron chemically with a chelating agent	5 % water-soluble Fe, at least 8/10 of the declared value of which has been chelated	Name of the chelating agent	Water-soluble iron (Fe) Chelated iron (Fe)



M4

Number	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
4c	Iron fertilizer solution	Product obtained by dissolving types 4a and/or one of the type 4b in water	2 % water-soluble Fe	The designation must include: (a) the name(s) of the mineral anion(s); (b) the name of any chelating agent if present.	Water-soluble iron (Fe) Chelated iron (Fe) if present

MANGANESE

5a	Manganese salt	Chemically obtained product containing a mineral manganese salt (Mn II) as its essential ingredient	17 % water-soluble Mn	The designation must include the name of the combined anion	Water-soluble manganese (Mn)
5b	Manganese chelate	Water-soluble product obtained by combining manganese chemically with a chelating agent	5 % water-soluble Mn, at least 8/10 of the declared value of which has been chelated	Name of the chelating agent	Water-soluble manganese (Mn) Chelated manganese (Mn)
5c	Manganese oxide	Chemically obtained product containing manganese oxides as essential ingredients	40 % total Mn Particle size: at least 80 % passing through a 0,063 mm sieve		Total manganese (Mn)
5d	Manganese-based fertilizer	Product obtained by mixing types 5a and 5c	17 % total Mn	The designation must include the name of the manganese components	Total manganese (Mn) Water-soluble manganese (Mn) if this accounts for at least 1/4 of the total manganese
5e	Manganese-based fertilizer solution	Product obtained by dissolving types 5a and/or one of the type 5b in water	3 % water-soluble Mn	The designation must include: (a) the name(s) of the mineral anion(s); (b) the name of any chelating agent if present.	Water-soluble manganese (Mn) Chelated manganese (Mn) if present

▼ M4

Number	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
MOLYBDENUM					
6a	Sodium molybdate	Chemically obtained product containing sodium molybdate as its essential ingredient	35 % water-soluble Mo		Water-soluble molybdenum (Mo)
6b	Ammonium molybdate	Chemically obtained product containing ammonium molybdate as its essential ingredients	50 % water-soluble Mo		Water-soluble molybdenum (Mo)
6c	Molybdenum-based fertilizer	Product obtained by mixing types 6a and 6b	35 % water-soluble Mo	The designation must include the names of the molybdenum components	Water-soluble molybdenum (Mo)
6d	Molybdenum-based fertilizer solution	Product obtained by dissolving types 6a and/or one of the type 6b in water	3 % water-soluble Mo	The designation must include the name(s) of the molybdenum component(s)	Water-soluble molybdenum (Mo)
ZINC					
7a	Zinc salt	Chemically obtained product and having as its essential ingredient a mineral salt of zinc	15 % water-soluble Zn	The designation must include the name of the mineral anion	Water-soluble zinc (Zn)
7b	Zinc chelate	Water-soluble product obtained by combining zinc chemically with a chelating agent	5 % water-soluble Zn, at least 8/10 of the declared content of which has been chelated	Name of the chelating agent	Water-soluble zinc (Zn) Chelated Zinc (Zn)
7c	Zinc oxide	Chemically obtained product and having as its essential ingredient zinc oxide	70 % total Zn Particle size: at least 80 % passing through a 0,063 mm sieve		Total zinc (Zn)
7d	Zinc-based fertilizer	Product obtained by mixing types 7a and 7c	30 % total Zn	The designation must include the name of the zinc components present	Total zinc (Zn) Water-soluble zinc (Zn) if this accounts for at least 1/4 of the total zinc (Zn)

▼ M4

Number	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
7e	Zinc-based fertilizer solution	Product obtained by dissolving types 7a and/or one of type 7b in water	3 % water-soluble Zn	The designation must include: (a) the name(s) of the mineral anion(s); (b) the name of any chelating agent if present.	Water-soluble zinc (Zn) Chelated zinc (Zn) if present

▼ **M4****MINIMUM TRACE-ELEMENT CONTENT, PERCENTAGE WEIGHT OF FERTILIZER**

CHAPTER B

SOLID OR FLUID MIXTURES OF TRACE ELEMENTS

	Where the trace element is present in a form that is:	
	exclusively mineral	chelated or complexed
For a trace element:		
Boron (B)	0,2	0,2
Cobalt (Co)	0,02	0,02
Copper (Cu)	0,5	0,1
Iron (Fe)	2,0	0,3
Manganese (Mn)	0,5	0,1
Molybdenum (Mo)	0,02	—
Zinc (Zn)	0,5	0,1

Minimum total of trace elements in a solid mixture: 5 % by mass of the fertilizer.

Minimum total of trace elements in a solid mixture: 2 % by mass of the fertilizer.

CHAPTER C

EEC FERTILIZERS CONTAINING MAJOR AND/OR SECONDARY ELEMENTS WITH TRACE ELEMENTS APPLIED TO THE SOIL

	For crops or grassland	For horticultural use
Boron (B)	0,01	0,01
Cobalt (Co)	0,002	—
Copper (Cu)	0,01	0,002
Iron (Fe)	0,5	0,02
Manganese (Mn)	0,1	0,01
Molybdenum (Mo)	0,001	0,001
Zinc (Zn)	0,01	0,002

CHAPTER D

EEC FERTILIZERS CONTAINING MAJOR AND/OR SECONDARY ELEMENTS WITH TRACE ELEMENTS FOR LEAF SPRAYS

Boron (B)	0,01
Cobalt (Co)	0,002
Copper (Cu)	0,002
Iron (Fe)	0,02
Manganese (Mn)	0,01
Molybdenum (Mo)	0,001
Zinc (Zn)	0,002

▼ **M4**

CHAPTER E

LIST OF AUTHORIZED ORGANIC COMPLEXING AGENTS FOR TRACE ELEMENTS**Definition of complexed trace elements:**

Within the meaning of this Directive complexed trace elements are defined as combinations where the metal is present in the form of:

- a chelated product
- a complexed product

Authorized products:1. *Chelating agents:*

Sodium, potassium or ammonium acid or salts of:

ethylene diamine tetraacetic acid:	EDTA	$C_{10}H_{16}O_8N_2$
diethylene triamine pentaacetic acid:	DPTA	$C_{14}H_{23}O_{10}N_3$
ethylene diamine — di (O-hydroxyphenyl acetic) acid:	EDDHA	$C_{18}H_{20}O_6N_2$
hydroxy-2 ethylene diamine triacetic acid:	HEEDTA	$C_{10}H_{18}O_7N_2$
ethyldiamine-di (O-hydroxy P-methyl phenyl) acetic acid:	EDDHMA	$C_{20}H_{24}N_2O_6$
ethylene diamine di (5-carboxy-2-hydroxyphenyl) acetic acid:	EDDCHA	$C_{20}H_{20}O_{10}N_2$

2. *Complexing agents (*)*

(*) List to be drawn up.

▼B*ANNEX II***PROVISIONS CONCERNING IDENTIFICATION AND LABELLING****1. Compulsory identification markings**

- (a) The words '►**M6** EC FERTILIZER ◀' in capital letters.
- (b) The designation of the type of fertilizer, in accordance with Annex I, and the numbers indicating the nutrient content which, for compound fertilizers, should be in the order laid down by the said designation.
- (c) The declared content in respect of each nutrient; and the declared content expressed as forms and/or solubilities where those are specified in Annex I.

The nutrient content for straight and compound fertilizers must be given as a percentage by weight, as whole numbers or, where necessary, to one decimal place and for compound fertilizers in the following order: N, P₂O₅ and/or P, K₂O and/or K.

▼M1

The additional information on the fertilizing components of fluid fertilizers may be expressed in approximately equivalent terms of weight versus volume (kilograms per hectolitre or grams per litre).

Quantities of a fluid fertilizer shall be expressed by mass. The expression of quantities of fluid fertilizers by volume shall be optional.

▼B

The forms and solubilities of the nutrients must also be expressed as a percentage by weight of fertilizer, except where Annex I explicitly provides that this content shall be otherwise expressed.

Nutrients must be indicated both in words and by the appropriate chemical symbols (e.g. nitrogen (N), phosphorus (P), phosphorus pentoxide (P₂O₅), potassium (K), potassium oxide (K₂O), magnesium (Mg), magnesium oxide (MgO)).

- (d) Guaranteed net or gross weight.
If the gross weight is given, the tare weight must be indicated beside it.
- (e) The name or trade name or trademark and the address of the person responsible for marketing the fertilizer, established within the Community.

2. Labelling requirements

- (a) The labels or markings printed on the package and giving the particulars mentioned under 1 must be placed in a conspicuous position. Attached labels must be held in place by whatever system is used for closing the package. If this system consists of a lead or other type of seal, the seal must bear the name or mark of the person responsible referred to under 1 (e).
- (b) The markings referred to in paragraph 1 must be and must remain indelible and clearly legible.
- (c) In the cases referred to in Article 3, a copy of the documents containing the identification markings must accompany the goods and be accessible for inspection purposes.

▼B

ANNEX III

TOLERANCES

- (a) The tolerances given in this Annex are the permitted deviation of the measured value of a nutrient from its declared value.
- (b) They are intended to accommodate variations in manufacturing, sampling and analysis.
- (c) No tolerances are allowed in respect of the minimum and maximum contents specified in Annex I.
- (d) Where no maximum is given there are no restrictions on an excess of nutrient above the declared amount.
- (e) The tolerance allowed in respect of the declared nutrient contents in the various types of fertilizer are as follows:

A. STRAIGHT FERTILIZERS	<i>absolute value in percentage by weight expressed as N, P₂O₅, K₂O, MgO, Cl</i>
I. Nitrogenous fertilizers	
calcium nitrate	0.4
calcium — magnesium nitrate	0.4
sodium nitrate	0.4
chile nitrate	0.4
calcium cyanamide	1.0
nitrogenous calcium cyanamide	1.0
ammonium sulphate	0.3
Ammonium nitrate or calcium ammonium nitrate:	
— up to and including 32 %	0.8
— more than 32 %	0.6
ammonium sulphate-nitrate	0.8
magnesium sulphonitrate	0.8
magnesium ammonium nitrate	0.8
urea	0.4
▼M1	
nitrogen fertilizer solution	0.6
ammonium nitrate — urea solution	0.6
▼M5	
Urea-ammonium sulphate	0.5
▼M7	
calcium nitrate suspension	0.4
nitrogen fertilisers solution with urea formaldehyde	0.4
nitrogen fertiliser suspension with urea formaldehyde	0.4
▼B	
II. Phosphatic fertilizers	
Thomas slag:	
— declaration expressed as a range of 2 % by weight	0
— declaration expressed as a single number	1.0
Other phosphatic fertilizers	
P ₂ O ₅ solubility in:	(number of fertilizer in Annex I)
— mineral acid	(3, 6, 7) 0.8
— formic acid	(7) 0.8

▼B

— neutral ammonium citrate	(2a, 2b, 2c,)	0·8
— alkaline ammonium citrate	(4, 5, 6)	0·8
— water	(2a, 2b, 3)	0·9
	(2c)	1·3

III. Potassic fertilizers

kainit		1·5
enriched kainit salt		1·0
muriate of potash:		
— up to and including 55 %		1·0
— more than 55 %		0·5
potassium chloride containing magnesium salt		1·5
sulphate of potash		0·5
sulphate of potash containing magnesium salt		1·5

Other components

magnesium oxide		0·9
chlorine		0·2

B. COMPOUND FERTILIZERS**1. Nutrient elements**

— N		1·1
— P ₂ O ₅		1·1
— K ₂ O		1·1

2. Total negative deviations from the declared value

— binary fertilizers		1·5
— ternary fertilizers		1·9

- (f) The tolerance allowed in respect of the declared content for the various forms of nitrogen or the declared solubilities of phosphorus pentoxide is one-tenth of the overall content of the nutrient concerned with a maximum of 2 % by weight, provided that the overall content of that nutrient remains within the limits specified in Annex I and the tolerances specified in paragraph (e) above.