

# EUROPEAN COMMUNITIES (MARKETING OF FERTILISERS) REGULATIONS 1978

I, JAMES GIBBONS, Minister for Agriculture, in exercise of the powers conferred on me by section 3 of the European Communities Act, 1972 (No. 27 of 1972), for the purpose of giving effect to Council Directive No. 76/116/EEC hereby make the following regulations:

## REG 1

Short title and commencement.

1. These Regulations may be cited as the European Communities (Marketing of Fertilisers) Regulations, 1978 and shall come into effect on the 1st day of February, 1978.

## REG 2

Interpretation.

2. (1) In these Regulations:—

"Annex I" means Annex I to the directive;

"Annex II" means Annex II to the directive;

"authorised officer" means an officer of the Minister authorised in writing by the Minister for the purposes of these Regulations;

"the directive" means Council Directive No. 76/116/EEC of 18 December, 1975(a);

"Member State" means a Member State of the European Communities;

"the Minister" means the Minister for Agriculture;

"statute" has the same meaning as in section 3 of the Interpretation Act, 1937 (No. 38 of 1937);

"third country" means a country or territory which is not a Member State;

"State Chemist" means the head of the State Laboratory or a person authorised by him for the purposes of these Regulations.

(2) Any reference in these Regulations to place on the market or to marketing includes a reference to barter, offer or expose for sale by wholesale or retail, or have in possession for sale by wholesale or retail and invite to buy, and kindred words shall be construed accordingly.

(3) A word or expression that is used in these Regulations and is also used in the directive has, unless the contrary intention appears, the meaning in these Regulations that it has in the directive.

## REG 3

Application.

3. These Regulations apply to any fertiliser which is designated as "EEC fertiliser".

#### REG 4

Marketing requirements and responsible person.

4. (1) A fertiliser to which these Regulations apply may not be marketed unless:—

(a) OJ No. L 24/21, 30 January, 1976.

( a ) it is a type of solid fertiliser specified in column (1) of Part I of the Schedule to these Regulations,

( b ) it is a product described in column (2) of the said Part I opposite the mention in the said column (1) of its type of solid fertiliser,

( c ) it complies with the requirements as to the minimum content of nutrients specified in column (3) of the said Part I opposite such mention and any other requirements so specified,

( d ) it complies with the requirements (if any) specified in column (4) and (5) of the said Part I opposite such mention,

( e ) there are given or used—

(i) the compulsory particulars mentioned in Part II of the said Schedule, and

(ii) the compulsory identification markings referred to in subparagraph (a), (b), (d) and (e) of paragraph 1 of Annex II to the directive,

( f ) in case the measured value of a nutrient contained in the fertiliser deviates from the nutrient's declared value, such deviation is within the relevant tolerances specified in Part III of the said Schedule,

( g ) in case the fertiliser is packaged, the provisions of Article 6 of the directive are complied with, and

( h ) the labelling requirements of paragraph (2) of the said Annex II are complied with in relation to it, and such particulars and markings shall,

( i ) in case the quantity of fertiliser contained in a container does not exceed 100 kg., either be marked on the container or appear on a label attached to the container,

( j ) in case the quantity of fertiliser so contained exceeds 100 kg., or in case the fertiliser is supplied in bulk, appear on documents accompanying the fertiliser.

(2) A fertiliser to which these Regulations apply shall not be placed on the market if the markings on the packages or labels relating to it, or on the documents accompanying it and which so relate, are markings other than—

( a ) markings used for the purpose of complying with this Regulation,

( b ) optional data (if any) regarding the fertiliser which is data listed in column (4) or (5) of Part I of the Schedule to these Regulations opposite the mention of the relevant solid fertiliser type,

( c ) a mark or description mentioned in Article 4 (1) (c) of the directive,

( d ) a direction mentioned in Article 4 (1) (d) of the directive, or

( e ) markings permitted or required to be used by any act of the European Communities or by any statutory instrument made under section 3 of the European Communities Act, 1972 (No. 27 of 1972),

other than these Regulations.

(3) In addition to the foregoing, the following requirements shall be complied with, namely—

( a ) the indications referred to in subparagraphs (c) and (d) of paragraph (2) of this Regulation, or either of them, shall, if used, not conflict with, and shall be clearly separated from, the markings mentioned in subparagraph (a) of the said paragraph (2) and, where used, the data mentioned in subparagraph (b) of that paragraph, and

( b ) the markings and particulars referred to in paragraph (1) (e) of this Regulation, any data which is data referred to in the said subparagraph (b), any mark or description which is a mark or description referred to in the said subparagraph (c) and any direction which is a direction referred to in the said subparagraph (d) shall be clearly separated from any other information on packages containing, or labels or other documents used in relation to a fertiliser to which these Regulations apply.

(4) The indications, markings or data mentioned in paragraph (2) of this Regulation shall, when given or used, be at least in the Irish language or the English language.

(5) A person who contravenes any of the foregoing provisions of this Regulation shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding £200 or, at the discretion of the Court, to imprisonment for a term not exceeding six months.

## REG 5

Sampling on request.

5. (1) Where a person has on his premises any fertiliser to which these Regulations apply which he has purchased and which he proposes to use in the course of his farming operations, he may apply in writing to the Minister to have a sample thereof taken for analysis.

(2) An application under this Regulation shall be—

( a ) made in writing within the period of twenty-eight days beginning on the date on which the fertiliser to which the application relates was delivered to the applicant, and

( b ) accompanied by a fee of £5.

(3) Where an application is duly made under this Regulation, an (authorised officer shall, subject to paragraph (4) of this Regulation, take in accordance with Regulation 3 of the European Communities Sampling and Analysis of Fertilisers) Regulations, 1978, and thereafter transmit to the State Chemist, a sample of the fertiliser to which the application relates.

(4) Where an application is made under this Regulation, the following provisions shall apply:

( a ) an authorised officer shall not take a sample after the expiration of the period of forty-two days beginning on the date on which the relevant fertiliser was delivered to the applicant,

( b ) an authorised officer may, if he thinks fit, decline to take a sample if—

(i) he is not satisfied that the applicant has purchased such fertiliser, or

(ii) he is not satisfied that the applicant proposes to use such

- fertiliser in the course of his farming operations, or
- (iii) he is not satisfied that such fertiliser as presented for sampling is fairly representative of the fertiliser as delivered to the applicant, or
- (iv) the applicant does not furnish such information relating to such fertiliser as the authorised officer may require.
- (5) Where the State Chemist receives a sample taken in pursuance of an application under this Regulation, he shall comply with the requirements of Regulation 4 of the European Communities (Sampling and Analysis of Fertilisers) Regulations, 1978, and shall send to the applicant a certificate, in the form set out in Part IV of the Schedule to these Regulations, of the result of the analysis.
- (6) Subject to paragraph (7) of this Regulation, all fees under this Regulation shall be paid into or disposed of for the benefit of the Exchequer in accordance with the directions of the Minister for Finance and, accordingly, the Public Offices Fees Act, 1879, shall not apply in respect thereof.
- (7) In any case in which he considers it proper so to do (not being a case in which the applicant has received a certificate under this Regulation), the Minister may refund a fee paid in relation to an application under this Regulation.
- (8) For the purpose of this Regulation a fertiliser shall not be regarded as having been delivered to a purchaser unless it arrives at the destination to which it is consigned, whether the consignment is by direction of the supplier or the purchaser.

## REG 6

Records returns etc.

6. (1) Every person who carries on, or is employed in connection with, the business of manufacturing, importing or marketing fertiliser which is designated "EEC fertiliser" shall—
- ( a ) keep records of his transactions in such fertiliser;
- ( b ) produce at the request of an authorised officer any books, documents or records relating to such business which are in the possession or under the control of such person;
- ( c ) permit an authorised officer to inspect and take extracts from such books, documents or records and give to the officer any information which he may reasonably require in relation to any entries therein;
- ( d ) afford to an authorised officer reasonable facilities for inspecting the stock of any such fertiliser which is for the time being on any premises on which such person carries on such a business;
- ( e ) give to an authorised officer any information he may reasonably require in relation to such transactions including in particular information which he may reasonably require regarding any fertiliser which is so designated and is specified by him.
- (2) A person who contravenes any of the provisions of paragraph (1) of this Regulation shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding £200 or, at the discretion of the Court, to imprisonment for a term not exceeding six months.

## REG 7

Powers of authorised officers.

7. (1) In addition to the powers conferred by Regulation 6 of these Regulations an authorised officer may at all reasonable times enter and inspect any premises, railway wagon, vehicle, ship, vessel, aircraft or other thing (e.g. a container) used to transport in which he has reasonable grounds for believing that any fertiliser to which these Regulations apply is being marketed, manufactured for sale, imported, stored or kept for sale or sold and may examine and take samples of any fertiliser designated as "EEC fertiliser" which he finds in the course of his inspection.

(2) In any proceedings for an offence under these Regulations evidence of the result of analysis of a sample taken under these Regulations may be given if it is proved that—

- (a) the sample was taken in accordance with the European Communities (Sampling and Analysis of Fertilisers) Regulations, 1978,
- (b) the analysis was carried out in accordance with the said Regulations,

and, save as aforesaid, evidence of the result of such an analysis shall not be given in any such proceedings.

(3) Any person who obstructs or interferes with an authorised officer in the course of exercising a power conferred on him under this Regulation shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding £100.

(4) The Minister shall furnish an authorised officer with a certificate of his appointment and, when exercising any powers conferred by these Regulations, the officer shall if requested by any person affected, produce the certificate to that person.

## REG 8

Power to publish results of analyses.

8. The Minister may at his discretion publish the result of any analysis to made by reason either of an application under Regulation 5 or of the taking of a sample pursuant to Regulation 7 of these Regulations.

## REG 9

Certificate of analysis as evidence.

9. In any legal proceedings the production of a certificate in the form specified in Part IV of the Schedule to these Regulations and purporting to be signed by the State Chemist shall be sufficient evidence of the facts stated in the certificate and of the analysis having been carried out in accordance with the European Communities (Sampling and Analysis of Fertilisers) Regulations, 1978, unless either party requires the person who made the analysis to be called as a witness.

## REG 10

Tampering with samples.

10. If any person fraudulently—

( a ) tampers with any thing so as to procure that any sample taken pursuant to Regulations 5 or 7 of these Regulations does not correctly represent the substance sampled, or

( b ) tampers or interferes with any sample taken under these Regulations,

he shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding £100 or, at the discretion of the court, to imprisonment for a term not exceeding six months.

## REG 11

Additional responsible person.

11. (1) ( a ) Where a fertiliser is placed on the market in contravention of Regulation 4 of these Regulations by a person other than the person who in relation to the fertiliser is the person described in paragraph 1 ( e ) of Annex II to the directive, then the person so described shall, if at the time of the contravention he has a place of business in the State, also be guilty of an offence.

( b ) Where—

( i ) a fertiliser is placed on the market in contravention of Regulation 4 of these Regulations by a person other than the person who in relation to the fertiliser is the person so described, and

( ii ) the fertiliser is imported fertiliser and is so placed on the market by a person other than the importer, then the person by whom the fertiliser was imported shall also be guilty of an offence.

(2) Proceedings for an offence under this Regulation, and for an offence under Regulation 4 of these Regulations shall not be brought in respect of the same act.

(3) ( a ) In any proceedings for an offence under this Regulation it shall be a defence for a defendant to prove that he took reasonable steps to avoid the relevant fertiliser being placed on the market in contravention of Regulation 4 of these Regulations.

( b ) In any proceedings for an offence under paragraph (1) ( b ) of this Regulation it shall be a defence for the defendant to prove that at the time of the contravention the person who in relation to the fertiliser concerned is the person described in paragraph (1) ( e ) of Annex II to the directive had a place of business in the State.

(4) A person guilty of an offence under this Regulation shall be liable on summary conviction to a fine not exceeding £200 or, at the discretion of the Court, to imprisonment for a term not exceeding six months.

## REG 12

Prosecution of offences.

12. An offence under these Regulations may be prosecuted by the Minister.

## REG 13

Saver.

13. Nothing in these Regulations shall be construed as affecting a provision of any statute, whether passed before or after the making of these Regulations, which is a provision for the protection of human life or health, animal life or health, plant life or health or industrial or commercial property.

## REG 14

Amendment of Fertilisers, Feedingstuffs and Mineral Mixtures Regulations, 1957.

14. The Fertilisers, Feedingstuffs and Mineral Mixtures Regulations, 1957 (S.I. No. 264 of 1957), shall not apply to any fertiliser to which these Regulations apply.

## SCHEDULE.

### PART 1.

Data required or permitted to be used by these Regulations.

#### A. STRAIGHT FERTILISERS.

##### 1. NITROGENOUS FERTILISERS.

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)
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			
Additional optional particulars:	Nitric nitrogen	Ammoniacal nitrogen			
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 magnesium in the form of water-soluble salts expressed as magnesium: 3% Mg				
	Nitric nitrogen				
Water-soluble magnesium salts expressed as magnesium	Sodium nitrate (nitrate of soda)	Chemically obtained product containing sodium nitrate as its essential ingredient			
		15% N			
	Nitrogen expressed as nitric nitrogen	Nitric nitrogen			

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) Chile nitrate Product prepared from caliche, containing sodium nitrate as its essential ingredient 15% N

Nitrogen expressed as nitric nitrogen Nitric nitrogen 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 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 Sulphate of ammonia Chemically obtained product containing ammonium sulphate as its essential ingredient 20% N

Nitrogen expressed as ammoniacal nitrogen Ammoniacal nitrogen

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) Ammonium nitrate or calcium ammonium nitrate Chemically obtained product 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 fertiliser 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 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 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; 3% Mg

Watersoluble magnesium salts expressed as magnesium Total nitrogen

Ammoniacal nitrogen

Nitric nitrogen

Water-soluble

magnesium salts expressed as magnesium

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) 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 3% Mg

Magnesium expressed as total magnesium Total nitrogen

Ammoniacal nitrogen

Nitric nitrogen

Total magnesium 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

## II PHOSPHATIC FERTILISERS

Where a particle size criterion is prescribed for the basic constituent materials of fertilisers sold in granular form it will be established by an appropriate analytical method.

### 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 5·2% P

Phosphorus soluble in mineral acids, at least 75% of the declared

content of phosphorus being soluble in 2% citric acid; or Phosphorus

soluble in 2% citric acid 4·4% P

Phosphorus 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

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) 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 7% P

Phosphorus soluble in neutral ammonium citrate, at least 93% of the

declared content of P being water-soluble

Test sample: 1 g Phosphorus soluble in neutral ammonium citrate

Water-soluble phosphorus 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 11% P

Phosphorus soluble in neutral ammonium citrate, at least 93% of the declared content of P being water-soluble

Test sample: 1 g Phosphorus soluble in neutral ammonium citrate

Water-soluble phosphorus Triple superphosphate Product obtained by reaction of ground mineral phosphate with phosphoric acid and containing monocalcium phosphate as its essential ingredient 16.5% P

Phosphorus soluble in neutral ammonium citrate, at least 93 % of the declared content of P being water-soluble

Test sample: 3 g Phosphorus soluble in neutral ammonium citrate

Water-soluble phosphorus

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) 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 8.5% P

Phosphorus soluble in mineral acids, at least 40% of the declared content of P 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 (soluble in mineral acids)

Phosphorus soluble in water Dicalcium phosphate Product obtained by precipitation of solubilized phosphoric acid from mineral phosphates or bones, and containing dicalcium phosphate dihydrate as its essential ingredient 16.5% P

Phosphorus 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 soluble in alkaline ammonium citrate

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) 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 11% P

Phosphorus 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

mmPhosphorus soluble in alkaline ammonium citrateAluminium-calcium phosphateProduct obtained in amorphous form by heat treatment and grinding, containing aluminium and calcium phosphates as essential ingredients13% P

Phosphorus soluble in mineral acids, at least 75 % of the declared content of P 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 mmTotal phosphorus (soluble in mineral acids)

Phosphorus soluble in alkaline ammonium citrate

Type designationData on method of production and essential ingredientsMinimum content of nutrients (percentage by weight); data on the expression of nutrients; other requirementsOther data on the type designationNutrient content to be declared; forms and solubilities of the nutrients; other criteria(1)(2)(3)(4)(5)Soft ground rock phosphateProduct obtained by grinding soft mineral phosphates and containing tricalcium phosphate and calcium carbonate as essential ingredients11% P

Phosphorus soluble in mineral acids, at least 55 % of the declared content of P being soluble in 2% formic acid

Particle size:

— 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 mmTotal phosphorus (soluble in mineral acids)

Phosphorus soluble in 2% formic acid

Percentage by weight of material able to pass through a sieve with a mesh of 0·063 mm

### III. POTASSIC FERTILISERS

KainitProduct obtained from crude potassium salts8·5% K

Water-soluble potassium 3% Mg

Magnesium in the form of water-soluble salts, expressed as magnesiumUsual trade names may be addedWater-soluble potassium Water-soluble magnesium salts expressed as magnesiumEnriched kainit saltProduct obtained from crude potassium salts enriched by blending with potassium chloride.15% K

Water-soluble potassiumUsual trade names may be addedWater-soluble potassium

Optional mention of the water-soluble magnesium content when higher than 3% Mg

Type designationData on method of production and essential ingredientsMinimum content of nutrients (percentage by weight); data on the expression of nutrients; other requirementsOther data on the type designationNutrient content to be declared; forms and solubilities of the nutrients; other criteria(1)(2)(3)(4)(5)Muriate of potashProduct obtained from crude potassium salts and containing potassium chloride as its essential ingredient30·5% K

Water-soluble potassiumUsual trade names may be addedWater-soluble potassiumPotassium chloride containing magnesium saltProduct obtained from crude potassium salts with added magnesium salts and containing

potassium chloride and magnesium salts as essential ingredients 30·5% K  
Water-soluble potassium

3% Mg

Magnesium in the form of water-soluble salts, expressed as  
magnesium Water-soluble potassium

Water-soluble magnesium salts expressed as magnesium Sulphate of  
potash Product obtained chemically from potassium salts and containing  
potassium sulphate as its essential ingredient 39% K

Water-soluble potassium

Maximum chlorine content:

3% Cl Water-soluble potassium

Optional mention of the chlorine content where lower than 3 %

Cl 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 18·5% K

Water-soluble potassium

4·8% Mg

Magnesium in the form of water-soluble salts, expressed as magnesium

Maximum chlorine content: 3% Cl Usual trade names may be  
added Water-soluble potassium Water-soluble magnesium salts expressed as  
magnesium

Optional mention of the chlorine content where lower than 3% Cl

## B. COMPOUND FERTILISER TYPES.

### 1. NPK FERTILISERS.

Type designation Data on method of production Minimum content of  
nutrients (percentage by weight) Forms, solubilities and nutrient  
content to be declared as specified in column 5; particle size. Data  
for identification of the fertilisers; other

requirements. (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK NPK

Fertiliser Product obtained chemically or by blending, without addition

of organic nutrients of animal or vegetable origin 20%\* (N + P +

K) 3% N

2·18% P

4·15% K (1) Total nitrogen

(2) Nitric nitrogen

(3) Ammonical nitrogen

(4) Ureic nitrogen

(5) Cyanamide nitrogen (1) Water-soluble P

(2) P soluble in neutral ammonium citrate

(3) P soluble in neutral ammonium citrate and in water

(4) P soluble in mineral acids only

(5) P soluble in alkaline ammonium citrate (Petermann)

(6a) P soluble in mineral acids, of which at least 75% of the  
declared P content is soluble in 2% citric acid

(6b) P soluble in 2% citric acid (7) P soluble in mineral acids,  
of which at least 75% of the declared P content is soluble in

alkaline ammonium citrate (Joulie) Water-soluble K (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 fertiliser free from

Thomas slag, calcined phosphate, partially solubilized rock phosphate

and soft ground rock phosphate must be declared in accordance with

solubilities (1), (2) or (3): (1) Water-soluble

potassium

(2) The indication 'low in chlorine' is linked to a maximum content of 2% Cl.

(3) Chlorine content may be declared.— when the water-soluble P does not amount to  $\geq 87\%$  solubility (2) only shall be declared;—when the water-soluble P is at least  $\geq 87\%$  solubility (3) shall be declared, and the water-soluble P content must be indicated (solubility (1)).

The P content soluble in mineral acids only must not exceed  $\geq 87\%$ .

\*20% (N+P+K) to be calculated by multiplying the nutrient contents N, P, and K by 1, 2.29 and 1.2 respectively and adding the results of such multiplication.

Type designation Data on method of production Minimum of content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK which at least 75% of the declared P content is soluble in alkaline ammonium citrate (Joulie) For this type 1, the test sample for determining solubilities (2) and (3) shall be 1g.

2. (a) An NPK fertiliser 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 fertiliser must contain:

—at least  $\geq 87\%$  P soluble in mineral acids only (solubility (4));

—at least 2.2% P soluble in water and neutral ammonium citrate (solubility (3));

—at least 1.1% water-soluble P (solubility (1)).

This type of fertiliser must be marketed under the designation 'NPK fertiliser containing soft ground rock phosphate' or 'NPK fertiliser containing partially solubilised rock phosphate'. For this type 2(a), the test sample for determining solubility (3) shall be 3 g. (8) P soluble in mineral acids, of which at least 55% of the declared P content is soluble in 2% formic acid

Particle size of the basic phosphatic ingredients: Thomas slag: at least 75% able to pass through a sieve with a mesh of 0.63 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

Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK 2. (b) An NPK fertiliser 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 fertiliser must contain:—at least  $\geq 87\%$  of water-soluble P (solubility (1)):

—at least 22% of P according to solubility (7). This type of fertiliser must be marketed under the designation 'NPK fertiliser containing aluminium-calcium phosphate'.<sup>3</sup> In the case of the NPK fertilisers containing only one of the following types of phosphatic fertiliser:

Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements. (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK Thomas slag, calcined phosphate aluminium-calcium 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 must be given in accordance with the following solubilities:—for fertilisers based on Thomas slag: solubility (6b);—for fertilisers based on calcined phosphate: solubility (5);—for fertilisers based on aluminium-calcium phosphate: solubility (7);—for fertilisers based on soft ground rock phosphate: solubility (8).

## 2. NP FERTILISERS.

Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK NP Fertiliser Product obtained chemically or by blending without addition of organic nutrients of animal or vegetable origin.  $18\% (N+P) * 3\% N$   
 $2 \cdot 18\% P$  (1) Total Nitrogen  
(2) Nitric nitrogen  
(3) Ammoniacal nitrogen  
(4) Ureic nitrogen  
(5) Cyanamide nitrogen (1) Water-soluble P  
(2) P soluble in neutral ammonium citrate  
(3) P soluble in neutral ammonium citrate and in water.  
(4) P soluble in mineral acids only  
(5) P soluble in alkaline ammonium citrate (Petermann)  
(6a) P soluble in mineral acids of which at least 75% of the declared P content is soluble in 2% citric acid (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 fertiliser 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 does not amount to  $\cdot 87\%$  solubility (2) only shall be declared:—when the water-soluble P is at least  $\cdot 87\%$ , solubility (3) shall be declared, and the water-soluble P content must be indicated (solubility (1)).

Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements. (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK (6b) P

soluble in 2% citric acidThe P content soluble in mineral acids only must not exceed 87%.For this type 1, the test sample for determining solubilities (2) and (3) shall be 1 g.For this type 1, the test sample for determining solubilities (2) and (3) shall be 1 g.2(a). An NP fertiliser 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).(7) P soluble in mineral acids of which at least 75% of the declared P content is soluble in alkaline ammonium citrate (Joulie)

(8) P soluble in mineral acids of which at least 55% of the declared P content is soluble in 2 % formic acid 55% of the declared P content is soluble in 2% formic acidThis type of fertiliser must contain:

—at least 87 %P soluble in mineral acids only (solubility (4));—at least 2·2% P soluble in water and neutral ammonium citrate (solubility (3));—at least 1·1% water-soluble P (solubility (1)).This type of fertiliser must be marketed under the designation 'NP fertiliser containing soft ground rock phosphate' or 'NP fertiliser containing partially solubilized rock phosphate'For this type 2 (a), the test sample for determining solubility (3) shall be 3 g.

Type designationData on method of productionMinimum content of nutrients (percentage by weight)Forms, solubilities and nutrient content to be declared as specified in column 5; particle size.Data for identification of the fertilisers; other requirements(1)(2)(3)(5)TotalFor each of the nutrientsNPKNPK55% of the declared P content is soluble in 2% formic acidrock phosphate' or 'NP fertiliser containing partially solubilized rock phosphate'For this type 2(a), the test sample for determining solubility (3) shall be 3 g.Particle size of the basic phosphatic ingredients:Thomas slag:

Aluminium-calcium phosphate:

Calcined phosphate:

Soft ground rock phosphate:

Partially solubilized rock phosphate:at least 75% able to pass through a sieve with a mesh of 0·160 mm.  
at least 90% able to pass through a sieve with a mesh of 0·160 mm.  
at least 75% able to pass through a sieve with mesh of 0·160 mm.  
at least 90% able to pass through a sieve with a mesh of 0·063 mm.

at least 90% able to pass through a sieve with a mesh of 0·160 mm.2(b) An NP fertiliser 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 fertiliser must contain:

—at least 87% water-soluble P (solubility (1));  
—at least 2·2% P according to solubility (7).

This type of fertiliser must be marketed under the designation 'NP fertiliser containing aluminium-calcium phosphate'.

Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertilisers; other requirements (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK3. In the case of NP fertilisers containing only one of the following types of phosphatic fertiliser: Thomas slag, calcined phosphate, aluminium-calcium 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 must be given in accordance with the following solubilities:—for fertilisers based on Thomas slag: solubility (6b);—for fertilisers based on calcined phosphate: solubility (5);—for fertilisers based on aluminium-calcium phosphate: solubility (7);—for fertilisers based on soft ground rock phosphate: solubility (8).

\*18% (N+P) to be calculated by multiplying the nutrient contents N and P by 1 and 2·29 respectively and adding the results of such multiplication.

3. NK FERTILISERS. Type designation Data on method of production Minimum content of nutrients (percentage by weight) Forms, solubilities and nutrient content to be declared as specified in column 5; particle size. Data for identification of the fertiliser; other requirements (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPKNK Fertiliser Product obtained chemically or by blending, without addition of organic nutrients of animal or vegetable origin 18% \* (N+K.) 3% N 4·15% K (1) Total nitrogen (2) Nitric nitrogen (3) Ammoniacal nitrogen (4) Ureic nitrogen (5) Cyanamide nitrogen Water-soluble K (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 (2) The indication 'low in chlorine' is linked to a maximum content of 2%/Cl.

(3) Chlorine content may be declared

\*18 % (N+K) to be calculated by multiplying the nutrient contents N and K by 1 and 1·2 respectively and adding the results of such multiplication.

4. PK FERTILISERS. (1)(2)(3)(4)(5) Total For each of the nutrients NPK NPKPK Fertiliser Product obtained chemically or by blending, without addition of organic nutrients of animal or vegetable origin 18% \* (P+K) 2·18% P 4·15% K (1) Water-soluble P (2) P soluble in neutral ammonium citrate (3) P soluble in neutral ammonium citrate and in water (4) P soluble in mineral acids only (5) P soluble in alkaline ammonium citrate (Petermann) (6a) P soluble in mineral acids of which at least 75% of the declared P content is soluble in 2% citric acid. (6b) P soluble in 2% citric acid (7) P soluble in mineral acids of which at least 75% of the

declared P content is soluble in alkaline ammonium citrate (Joulie)  
(8) P soluble in mineral acids, of which at least 55% of the  
declared P content is soluble in 2% formic acid declared P content  
is soluble in 2% formic acid Water-soluble K1. A PK fertiliser 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 does not amount to 87 % solubility (2)  
only shall be declared;  
—when the water-soluble P is at least 87% solubility (3) shall be  
declared and the water-soluble P content must be indicated  
(solubility (1)).

The P content soluble in mineral only must not exceed 87 %  
For this type 1, the test sample for determining solubilities (2)  
and (3) shall be 1 g.

2(a). A PK fertiliser 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 fertiliser must contain:  
—at least 87% P soluble in mineral acids only (solubility (4));  
—at least 2.2% P soluble in water and neutral ammonium citrate  
(solubility (3));  
—at least 1.1% water-soluble P (solubility (1)).

This type of fertiliser must be marketed under the designation 'PK  
fertiliser containing soft ground rock phosphate' or 'PK fertiliser  
containing partially solubilized rock phosphate'.(1) Water-soluble  
potassium

(2) The indication 'low in chloride' is linked to a maximum content  
of 2 % Cl.

(3) Chloride contents may be declared

Type designation Data on method of production Minimum content of  
nutrients (percentage by weight) Forms, solubilities and nutrient  
content to be declared as specified in column 5; particle size. Data  
for identification of the fertilisers; other

requirements.(1)(2)(3)(4)(5) Total For each of the nutrients NPK NPK Particle  
size of the basic phosphatic ingredients: For this type 2(a), the  
test sample for determining solubility (3) shall be 3 g

2(b). A PK. fertiliser containing aluminium-calcium phosphate must be  
free from Thomas slag, calcined 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 fertiliser must contain:

—at least 87% water soluble P (solubility (1));

—at least 22% P according to solubility (7).

This type of fertiliser must be marketed under the designation 'PK  
fertiliser containing aluminium calcium phosphate'.

3. In the case of PK fertilisers containing only one of the  
following types of phosphatic fertiliser:

Thomas slag, calcined phosphate, aluminium-calcium 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 must be given in

accordance with the following solubilities:

- for fertilisers based on Thomas slag; solubility (6b);
  - for fertilisers based on calcined phosphate: solubility (5);
  - for fertilisers based on aluminium calcium phosphate: solubility (7);
  - for fertilisers based on soft ground rock phosphate: solubility (8).
- 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 at least of 0.063 mm  
Partially solubilized rock phosphate: at least 90% able to pass through a sieve with a mesh of 0.160 mm

\*18% (P+K) to be calculated by multiplying the nutrient contents P and K by 2.29 and 1.2 respectively and adding the results of such multiplication.

## PART II.

PARTICULARS REFERRED TO IN REGULATION 4 (1) (e) (i).

- (a) The declared content in respect of each nutrient must be given; and the declared content expressed as forms and/or solubilities where those are specified in Annex I must also be given.
- (b) The nutrient content for straight and compound fertilisers must be given as a percentage by weight, as whole numbers or, where necessary, to one decimal place and for compound fertilisers in the following order, N, P and K.
- (c) The forms and solubilities of the nutrients must also be expressed as a percentage by weight of fertiliser, except where Annex I explicitly provides that this content shall be otherwise expressed.
- (d) Nutrients must be indicated both in words and by the appropriate chemical symbols (e.g. nitrogen (N), phosphorus (P), potassium (K), magnesium (Mg)).

## PART III

### TOLERANCES

- (a) The tolerances given in this Part 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 fertiliser are as follows:

#### A. STRAIGHT FERTILISERS:

absolute value in percentage by weight expressed as N, P, K, Mg,  
CII. Nitrogenous fertilisers 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 sulphate 0.8 magnesium ammonium nitrate 0.8 urea 0.4  
III. Phosphatic fertilisers Thomas

slag: —declaration expressed as a range of 2% by weight  
 0 declaration expressed as a single number  
 0·44 Other phosphatic fertilisers P  
 solubility in: (number of fertiliser in Annex 1) —mineral acid(3, 6,  
 7)0·35 —formic acid(7)0·35 —neutral ammonium citrate(2a, 2b, 2c)0·35  
 —alkaline ammonium citrate(4, 5, 6)0·35 —water(2a, 2b,  
 3)0·40(2c)0·57 III. Potassic fertilisers kainit1·25 enriched kainit  
 salt0·83 muriate of potash: —up to and including 45%0·83 —more than  
 45%0·415 potassium chloride containing magnesium salt1·25 sulphate of  
 potash0·415 sulphate of potash containing magnesium salt1·25 Other  
 components magnesium0·54 chlorine0·2

**B. COMPOUND FERTILISERS:**

absolute value in percentage by weight expressed as N, P, K, Mg,  
 Cl1. Nutrient elements —N1·1 —P0·48 —K0·912. Total negative deviations  
 from the declared value —binary fertilisers NP,N+2·29P1·5 NK,N+1·2K1·5  
 PK, 2·29P+1·2K1·5 —ternary fertilisers N+2·29P+1·2K1·9

( f ) The tolerance allowed in respect of the declared content for  
 the various forms of nitrogen 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.

The tolerance allowed in respect of the declared solubilities of  
 phosphorus is one-tenth of the overall content of the nutrient with  
 a maximum of ·87% by weight, provided that the overall content of  
 the nutrient remains within the limits specified in Annex I and the  
 tolerances specified in paragraph (e) above.

**PART IV.**

**CERTIFICATE OF RESULT OF ANALYSIS OF A FERTILISER.**

Sample of.....marked.....received by the  
 Analyst on .....from  
 .....which was taken at the premises  
 of.....

This is to certify that the above-mentioned sample which was duly  
 fastened and sealed, has been analysed by..... under  
 the direction of the State Chemist, and that the result of the  
 analysis is as follows:

Per Cent Total Nitrogen  
 (N).....Ammoniacal Nitrogen  
 (N).....Nitric Nitrogen  
 (N).....Ureic Nitrogen  
 (N).....Cyanamide Nitrogen  
 (N).....Phosphorus (P) soluble in  
 neutral Ammonium Citrate and in  
 water.....Phosphorus (P) soluble in  
 water.....Phosphorus (P) soluble in  
 neutral Ammonium Citrate.....Phosphorus  
 (P) soluble in mineral acids  
 only.....Phosphorus (P) soluble in  
 Alkaline Ammonium Citrate  
 (Petermann).....Phosphorus (P) soluble  
 in 2 % citric acid.....Phosphorus  
 (P) soluble in mineral acids, of which at least 75 % of the

declared phosphorus content is soluble in Alkaline Ammonium Citrate (Joulie).....Phosphorus (P) soluble in mineral acids, of which at least 55 % of the declared phosphorus content is soluble in 2 % formic acid.....Potassium (K) soluble in water.....Water soluble Magnesium (Mg) salts expressed as Magnesium.....Total Magnesium (Mg).....Chlorine (C).....Amount found to pass through a 0.160 mm sieve.....Amount found to pass through a 0.063 mm sieve.....

On comparison of the results of the analysis with the particulars accompanying the sample it appears that the particulars furnished:—  
\*are correct, subject to the prescribed tolerance limits  
\*are not correct subject to the prescribed tolerance limits, in the following respects:—

This Certificate is given under Section of the Date  
.....Signed  
.....State Chemist  
\*Delete as appropriate

GIVEN under my Official Seal, this 19th day of January, 1978.  
JAMES GIBBONS,

Minister for Agriculture.

#### EXPLANATORY NOTE

The Regulations—

- (1) provide for a designation "EEC fertiliser",
- (2) lay down criteria with which fertilisers marketed under the designation 'EEC fertiliser' must comply.