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amending Decree No 474/2000 of the Ministry of Agriculture laying down requirements for fertilisers, as amended

Pursuant to § 3(5), § 4(9) and § 9(10)(e) of Act No 156/1998, on fertilisers, soil improvers, plant biostimulants and growing media, and on agrochemical testing of agricultural soils (the Fertilisers Act), as amended by Act No 308/2000, Act No 317/2004, Act No 9/2009, Act No 279/2013, Act No 61/2017, Act No 295/2017 and Act No 299/2020, the Ministry of Agriculture lays down the following:

Article I

Decree No 474/2000 laying down requirements for fertilisers, as amended by Decree No 401/2004, Decree No 209/2005, Decree No 271/2009, Decree No 131/2014, Decree No 237/2017, Decree No 312/2021 and Decree No 392/2021, is amended as follows:

1. § 1(5) reads as follows:

   ‘(5) The proportion of waste from sewage treatment plants in the raw material composition of the final batch of fertiliser produced by composting or anaerobic digestion may be up to 40% of the total weight of the fertiliser load. In the case of composting, this proportion shall be determined for each fertiliser load and, for anaerobic digestion, shall be determined on the basis of a balance of the raw materials received and used over a period of 1 year.’.

2. The following § 1(6) is added:

   ‘(6) The maximum number of germinable seeds or parts of plants with vegetative propagation capacity, such as rhizomes and root processes, per litre of compost is 3.’.

3. Annexes 1 to 4 read as follows:

Limit values for hazardous elements in fertilisers, soil improvers, plant biostimulants and growing media

1. Mineral fertilisers, soil improvers, plant biostimulants

a) mineral fertilisers with a phosphoric component, where the mass fraction of total phosphorus as P_2O_5 is 5 % or more:

mg/kg of P_2O_5	mg/kg of the fertiliser			
cadmium	lead	mercury	arsenic	chromium
50	100	1.0	30	150

b) mineral fertilisers with a phosphoric component, where the mass fraction of total phosphorus as P_2O_5 is less than 5%, other mineral fertilisers not containing phosphorus, soil improvers and plant biostimulants:

mg/kg of the fertiliser, soil improver, plant biostimulant				
cadmium	lead	mercury	arsenic	chromium
1[1)]	100	1.0	30	100

c) mineral-calcium and magnesium-calcium fertilisers:

mg/kg dry matter				
cadmium	lead	mercury	arsenic	chromium
1.5	100	0.5	30	100

d) ash from separate biomass combustion, products obtained through the pyrolysis process:

mg/kg dry matter					
cadmium	lead	mercury	arsenic	chromium	PAU[2)]
5	100	0.5	30	100	20

2. Organic fertilisers, growing media, manure

a) growing media

mg/kg dry matter							
cadmium	lead	mercury	arsenic	chromium	copper	nickel	zinc
2[3)]	100	1.0	30	100	100	50	300

b) organic fertilisers and manure with 13% or more dry matter content

mg/kg dry matter							
cadmium	lead	mercury	arsenic	chromium	copper	nickel	zinc
2	100	1.0	30	100	150	50	600

c) organic fertilisers and manure with less than 13% dry matter content

mg/kg dry matter							
cadmium	lead	mercury	arsenic	chromium	copper	nickel	zinc
2	100	1.0	30	100	250	50	1200

d) organic fertilisers and growing media produced using waste from wastewater treatment plants

Permissible quantities of micro-organisms (CFU[4)])		
Salmonellae sp. (in 50 g of the sample – 5 tested samples)	*Escherichia coli* or Enterococci (in 1 g – 5 tested samples)	
5 samples	4 samples	1 sample
negative	10^3	5×10^3

3. Organomineral Fertilizers

The limits for mineral and organic fertilisers shall apply to organic mineral fertilisers, depending on their composition and method of application.

If in the production, as one of the components, ash from the combustion of biomass or a product obtained by a pyrolysis process is used, the proportional risk element limits shall be applied according to the proportion of all the individual components of the final product.

Notes:
(1) 5 mg/kg fertiliser for fertilisers containing only zinc as a determining component.
2) PAH – polycyclic aromatic hydrocarbons (the sum of anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(ghi)perylene, phenanthrene, fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, naphthalene and pyrene).
3) 1 mg/kg dry matter for growing media intended for fruit and vegetable production.
4) colony-forming units.

The sampling methods and determination of microbiological analyses shall follow the principles provided in v AHEM 7/2001 (Acta hygienica, epidemiologica et microbiologica) and AHEM 1/2008 (Acta hygienica, epidemiologica et microbiologica)

Permissible tolerances from the values and content of the individual components of fertilisers

The deviations given in this Annex are negative deviations (excluding nitrification and urease inhibitors) in percentage by weight. The tolerances allowed in respect of the declared nutrient content for the different types of fertilisers are as follows:

1. Straight mineral fertilisers

a) nitrogen fertilisers

	N	CaO	MgO	S
calcium magnesium nitrate	0.4	0.9	0.9	
calcium nitrate, sodium nitrate, Chilean nitrate	0.4	0.9		
ammonium sulphate	0.3			1.0
ammonium nitrate with ammonium sulphate and magnesium sulphate	0.8		0.9	1.0
ammonium nitrate	0.8			
ammonium nitrate	0.6			
blend of ammonium sulphate with ammonium nitrate	0.8			1.0
calcium cyanamide, calcium cyanamide with nitrate	1.0	0.9		
urea	0.4			
urea with ammonium sulphate	0.5			1.0
liquid nitrogen fertilisers, liquid ammonia	0.6			
ammonium nitrate-urea solution	0.6			
calcium saltpetre – suspension	0.4	0.9		
nitrogen fertiliser solutions with urea formaldehyde	0.4			
nitrogen fertiliser suspensions with urea formaldehyde	0.4			

Where more than one form of nitrogen is indicated on the label, the tolerance for the content of each form of nitrogen shall be one fifth of the declared value, at most 2.0%.

b) phosphate fertilisers

	total P_2O_5	water-soluble component P_2O_5
superphosphate, enriched superphosphate	0.8	0.9
triple superphosphate	0.8	1.3
dicalcium phosphate, calcinated phosphate	0.8	
Thomas slag	1.0	

rock phosphate, partially enriched	0.8	0.9
aluminium calcium phosphate	0.8	
natural soft phosphorite	0.8	

Where more than one phosphorus solubility is indicated on the label, the tolerance for the content of each phosphorus solubility shall be one fifth of the declared value, at most 2.0%. This shall not apply to the proportion of water-soluble P_2O_5, which must be indicated.

c) potassic fertilisers

	K_2O	MgO
crude potassium salt (kainite)	1.5	0.9
enriched crude potassium salt	1.0	0.9
potassium chloride up to 55% K_2O	1.0	
potassium chloride exceeding 55% K_2O	0.5	
potassium chloride with magnesium	1.5	0.9
potassium sulphate	0.5	
potassium sulphate with magnesium	1.5	0.9
Kieserite with potassium sulphate	1.0	0.9

Where more than one potassium solubility is indicated on the label, the tolerance for the content of each potassium solubility shall be one fifth of the declared value, at most 2.0%.

d) fertilisers with calcium, magnesium and sulphur (secondary nutrient fertilisers)

	CaO	MgO	S
calcium chloride – solution	0.9		
magnesium sulphate		0.9	1.0
Kieserite		0.9	1.0
magnesium chloride – solution		0.5	
elemental sulphur			1.0
calcium sulphate	0.9		1.0

e) other components

chlorides	0.2	Cl^-

2. Mineral compound fertilisers

a) per nutrient

N	1.1
P_2O_5	1.1
K_2O	1.1

b) maximum negative divergences in respect of the indicated total nutrient content

NP fertiliser	1.5

NK fertiliser	1.5
PK fertiliser	1.5
NPK fertiliser	1.9

c) for the content of the different forms of nitrogen and the solubility of phosphorus and potassium the permissible divergence per nutrient form or nutrient solubility shall be one fifth of the declared value in the fertiliser, at most 2.0%.

d) other components

chlorides	0.2	Cl^-

e) secondary nutrients

CaO	25% of the indicated content, max. 0.9%
MgO	25% of the indicated content, max. 0.9%
S	25% of the indicated content, max. 1.0%
Na	25% of the indicated content, max. 0.67%

When declaring the calcium content, it must be stated whether it is the total content or the water-soluble fraction.

3. Fertilisers with micro-nutrients

micro-nutrients with a declared content of less than 2%	50% of the indicated content
trace nutrients with a declared content of 2% and more	0.4

4. Non-standardised mineral fertilisers (straight, compound)

a)

	liquid	**solid**
N	10 % of the indicated content	15% of the indicated content
P_2O_5	10 % of the indicated content	15% of the indicated content
K_2O	10 % of the indicated content	15% of the indicated content
CaO	25% of the indicated content, max. 0.9%	
MgO	25% of the indicated content, max. 0.9%	
S	25% of the indicated content, max. 1.0%	
Na	25% of the indicated content, max. 0.67%	

When declaring the calcium content, it must be stated whether it is the total content or the water-soluble fraction.

b) for the content of individual forms of nitrogen, phosphorus and potassium solubility the permissible divergence per nutrient form or nutrient solubility is always, depending on the nutrient form or solubility, one fifth of the declared value in the fertiliser, at most 2.0 %.

5. Mineral calcium and magnesium fertilisers

	CaO	$CaCO_3$	MgO	$MgCO_3$
a) limestone, dolomitic limestone, calcareous dolomite, dolomite		3.0		1.0
b) white burnt lime, dolomitic burnt lime	3.0		1.0	

6. Organic and organic mineral fertilisers

a) for each nutrient with a declared content of less than 3 %

N	0.2
P_2O_5	0.2
K_2O	0.2
negative divergences from the indicated total nutrient content	0.5

b) for each nutrient with a declared content of 3 % and more

N	1.0
P_2O_5	2.0
K_2O	1.0
negative divergences from the indicated total content	2.0

c) for secondary nutrients

CaO	25% of the indicated content, max. 0.9%
MgO	25% of the indicated content, max. 0.9%
S	25% of the indicated content, max. 1.0%
Na	25% of the indicated content, max. 0.67%

When declaring the calcium content, it must be stated whether it is the total content or the water-soluble fraction.

7. Nitrification and urease inhibitors

Nitrification and urease inhibitors listed in tables (a) and (b) may be added to nitrogen-type fertilisers 1.1.1-1.23 and 5.1-7.4.

a) nitrification inhibitors

Nitrification inhibitor composition and designation	Minimum and maximum inhibitor content
Dicyandiamide	2.25–4.5

Product containing dicyandiamide (DCD) and 1,2,4-triazole (TZ) (DCD:TZ) ratio in the mixture 10:1	2.0–4.0
Product containing 1,2,4-triazole (TZ) and 3-methylpyrazole (MP) (TZ:MP) ratio in the mixture 2:1	0.2–1.0
3,4-dimethyl-1H-pyrazole phosphate (DMPP)	0.8–1.6
Isomer mixture of 2-(3,4-dimethylpyrazole-1-yl)-succinic acid and 2-(4,5-dimethylpyrazole-1-yl)-succinic acid (DMPSA)	0.8–1.6

Inhibitor content as a weight percentage of total nitrogen present as ammonium nitrogen and urea nitrogen.

b) urease inhibitors

Urease inhibitor composition and designation	Minimum and maximum inhibitor content
N-butylthiophosphortriamide (NBPT)	0.09–0.2
N-(2-nitrophenyl)phosphoric triamide (2-NPT)	0.04–0.15
Mixture of N-butylthiophosphatetriamide (NBPT) and N-propylphosphatetriamide (NPPT)[1)] (NBPT:NPPT) ratio in the mixture 3:1	0.02–0.3

Inhibitor content as percent by weight of the total nitrogen present as urea nitrogen (percent by weight of urea nitrogen in the mixture multiplied by the mass fraction of the total inhibitor content).

[1)] Deviation of the fraction of NPPT 20 %.

Types of fertilisers, soil improvers and growing media

1. Straight mineral fertilisers

a) nitrogen fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
1.1.1	calcium nitrate	min. 15% N	total nitrogen	nitrogen expressed as total nitrogen, or as nitric and ammoniacal nitrogen; maximum ammoniacal nitrogen content: 1.5%	calcium nitrate simultaneously with ammonium nitrate	nitric and ammoniacal nitrogen content may be indicated
1.1.2	calcium magnesium nitrate	min. 13% N	nitrate nitrogen	nitrogen expressed as nitric nitrogen	calcium nitrate; magnesium nitrate	
		min. 5% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
1.1.3	magnesium nitrate solution	min. 6% N	nitrate nitrogen	nitrogen expressed as nitric nitrogen	magnesium nitrate dissolved in water	minimum value of pH 4
		min. 9% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
1.1.4	sodium nitrate	min. 15% N	nitrate nitrogen	nitrogen expressed as nitric nitrogen	sodium nitrate obtained by chemical reaction	
1.1.5	Chilean nitrate	min. 15% N	nitrate nitrogen	nitrogen expressed as nitric nitrogen	natural sodium nitrate	
1.2.1	nitrogenous lime (calcium cyanamide)	min. 18% N	total nitrogen	nitrogen expressed as total nitrogen; min. 75% of the indicated nitrogen is bound in the form of cyanamide	calcium cyanamide; calcium oxide with ammonium salts, urea	
1.2.2	nitrogenous lime with	min. 18% N	total nitrogen	nitrogen expressed as total	calcium cyanamide,	

	nitrate			nitrogen; min. 75% of nitrogen bound in the form of cyanamide; nitric nitrogen content: max. 3 %	calcium oxide, nitrate, together with ammonium salts, urea	
1.3	ammonium sulphate	min. 20% N	ammoniacal nitrogen	nitrogen expressed as ammoniacal nitrogen	ammonium sulphate	
1.4.1	ammonium nitrate	min. 28% N	total nitrogen; ammoniacal nitrogen; nitrate nitrogen	nitrogen expressed as total nitrogen; or as ammoniacal and nitric nitrogen, if each form accounts for half of the total nitrogen content	ammonium nitrate	
1.4.2	ammonium nitrate	min. 20% N	total nitrogen; ammoniacal nitrogen; nitrate nitrogen	nitrogen expressed as total nitrogen; or as ammoniacal and nitric nitrogen, if each form accounts for half of the total nitrogen content	ammonium nitrate with calcium carbonate, dolomite, magnesium carbonate (magnesite), calcium sulphate or magnesium sulphate	a fertiliser may be designated as ammonium nitrate with calcium, with dolomite or with sulphur only if it also contains, in addition to ammonium nitrate, calcium carbonate, calcium magnesium carbonate (dolomite), magnesium carbonate (magnesite), calcium sulphate or magnesium, min. 20%; purity of the carbonates and sulphates used min. 90%
1.5	ammonium sulphate with ammonium nitrate	min. 25% N	total nitrogen; ammoniacal nitrogen; nitrate nitrogen	nitrogen expressed as total nitrogen	ammonium nitrate with ammonium sulphate; min. 5% nitric nitrogen	
1.6	ammonium nitrate with ammonium sulphate and magnesium sulphate	min. 19% N	total nitrogen; ammoniacal nitrogen; nitrate nitrogen	nitrogen expressed as total nitrogen, or as ammoniacal and nitric nitrogen	ammonium nitrate with ammonium sulphate and magnesium sulphate; min. 6% nitric nitrogen	
		min. 5% MgO	water-soluble	magnesium in the form of a		

			magnesium oxide	water-soluble salt expressed as magnesium oxide		
1.7	ammonium nitrate with ammonium sulphate and magnesium sulphate	min. 19% N	total nitrogen; ammoniacal nitrogen; nitrate nitrogen	nitrogen expressed as total nitrogen, or as ammoniacal and nitric nitrogen	ammonium nitrate with ammonium sulphate and magnesium compounds (magnesium-calcium carbonate – dolomite, magnesium carbonate – magnesite, or magnesium sulphate)	water-soluble magnesium content may be indicated on the fertiliser label
		min. 5% MgO	total magnesium	magnesium in the form of a salt soluble in mineral acids, expressed as magnesium oxide		
1.8	urea	min. 44% N	ureic nitrogen	nitrogen expressed as ureic nitrogen	urea	maximum biuret content: 1.2%
1.9.1	calcium nitrate solution	min. 8% N	total nitrogen	nitrogen expressed as total nitrogen, or as ammoniacal and nitric nitrogen	calcium nitrate dissolved in water; ammoniacal nitrogen max. 1%	
1.9.2	liquid nitrogen fertiliser	min. 15% N	total nitrogen; ammoniacal nitrogen; nitric nitrogen; ureic nitrogen	nitrogen expressed as total nitrogen, or as ureic, ammoniacal and nitric nitrogen	product obtained by chemical reaction and dissolution in water; stable at atmospheric pressure; without the addition of nutrients of organic origin	maximum biuret content = ureic nitrogen content x 0.026; the fertiliser may be labelled with ‘low biuret content’ if the biuret content does not exceed 0.2%
1.9.3	ammonium nitrate-urea solution	min. 26% N	total nitrogen; ammoniacal nitrogen; nitric nitrogen; ureic nitrogen	nitrogen expressed as total nitrogen, or as ureic, ammoniacal and nitric nitrogen ureic nitrogen accounts for at least half of the total nitrogen	product obtained by chemical reaction and dissolution in water; stable at atmospheric pressure; without the addition of nutrients of organic origin	maximum biuret content: 0.5%
1.10	liquid ammonia	min. 80% N	ammoniacal nitrogen	nitrogen expressed as ammoniacal nitrogen	ammonia	the fertiliser must be labelled as ‘not suitable for surface application’
1.11	magnesium nitrate	min. 10% N	nitrate nitrogen	nitrogen expressed as nitric nitrogen	obtained chemically and containing magnesium nitrate hexahydrate as its essential ingredient	the fertiliser may be labelled with ‘in crystalline form’ if it is in the form of crystals
		min. 14% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed		

				as magnesium oxide		
1.12	ammonium sulphate with nitrification inhibitor (dicyanodiamide)	min. 20% N	total nitrogen; ammoniacal nitrogen; dicyanodiamide nitrogen	nitrogen expressed as total nitrogen; min. ammoniacal nitrogen content: 18%; min. dicyanodiamide nitrogen content: 1.5%	obtained chemically containing ammonium sulphate and dicyanodiamide	
1.13	ammonium nitrate with ammonium sulphate containing nitrification inhibitor (dicyanodiamide)	min. 24% N	total nitrogen; ammoniacal nitrogen; nitric nitrogen; dicyanodiamide nitrogen	nitrogen expressed as total nitrogen; min. nitric nitrogen content: 3 %; min. dicyanodiamide nitrogen content: 1.5 %	obtained chemically containing ammonium nitrate with ammonium sulphate and dicyanodiamide	
1.14	urea with ammonium sulphate	min. 30% N	total nitrogen; ammoniacal nitrogen; ureic nitrogen	nitrogen expressed as total nitrogen, or as ureic and ammoniacal nitrogen; min. ammoniacal nitrogen content: 4 %	obtained chemically containing urea and ammonium sulphate	maximum biuret content: 0.9%
		min. 14% SO_4^{-2}	water-soluble sulphate anion	sulphur compounds in the form of a water-soluble salt expressed as water-soluble sulphate anion		
1.15	urea formaldehyde	min. 36% N	total nitrogen; urea-formaldehyde nitrogen soluble in cold water; urea-formaldehyde nitrogen soluble in hot water	nitrogen expressed as total nitrogen; min. 20% of the total nitrogen content must be soluble in hot water; min. 33% of the total nitrogen content must be derived from urea formaldehyde; max. 5% ureic nitrogen;	obtained by the reaction of urea with formaldehyde containing urea-formaldehyde molecules as its main components	
1.16	nitrogen fertiliser containing crotonylidene diurea	min. 18% N	total nitrogen; crotonylidene-diureic nitrogen; ammoniacal, nitric and ureic nitrogen, if	nitrogen expressed as total nitrogen; min. 33% of the total nitrogen content must be derived from crotonylidene diurea; min. 3% nitrogen in ammoniacal, nitric or urea	product obtained chemically, containing crotonylidene diurea and a straight nitrogen fertiliser from the list of standardised nitrogen fertilisers, except	maximum biuret content = ureic and crotonylidene diurea nitrogen content x 0.026

			their content is min. 1%	form	products 1.2.1, 1.2.2, 1.4.1 and 1.4.2	
1.17	nitrogen fertiliser containing isobutylidene diurea	min. 18% N	total nitrogen; isobutylidene-diureic nitrogen; ammoniacal, nitric, and ureic nitrogen, if their content is min. 1%	nitrogen expressed as total nitrogen; min. 33% of the total nitrogen content must be derived from isobutylidene diurea; min. 3% nitrogen in ammoniacal, nitric or urea form	product obtained chemically, containing crotonylidene diurea and a straight nitrogen fertiliser from the list of standardised nitrogen fertilisers, except products 1.2.1, 1.2.2, 1.4.1 and 1.4.2	maximum biuret content = ureic and isobutylidene diurea nitrogen content x 0.026
1.18	nitrogen fertiliser containing urea formaldehyde	min. 18% N	total nitrogen; urea-formaldehyde nitrogen soluble in cold water; urea-formaldehyde nitrogen soluble in hot water ammoniacal, nitric, and ureic nitrogen, if their content is min. 1%	nitrogen expressed as total nitrogen; min. 33% of the total nitrogen content must be derived from urea formaldehyde; min. 20% of the total nitrogen content must be soluble in hot water; min. 3% nitrogen in ammoniacal, nitric or urea form	product obtained chemically, containing urea formaldehyde and a straight nitrogen fertiliser from the list of standardised nitrogen fertilisers, except products 1.2.1, 1.2.2, 1.4.1 and 1.4.2	maximum biuret content = ureic and urea-formaldehyde nitrogen content x 0.026
1.19	crotonylidene diurea	min. 28% N	total nitrogen; crotonylidene-diureic nitrogen;	nitrogen expressed as total nitrogen; min. 25% of the total nitrogen content must be derived from crotonylidene diurea; max. 3% ureic nitrogen	product obtained chemically or by the reaction of urea with crotonic aldehyde	
1.20	isobutylidene diurea	min. 28% N	total nitrogen; isobutylidene-diureic nitrogen;	nitrogen expressed as total nitrogen; min. 25% of the total nitrogen content must be derived from isobutylidene diurea; max. 3% ureic nitrogen	product obtained chemically or by the reaction of urea with isobutyl aldehyde	
1.21	calcium nitrate –	min. 8% N	total nitrogen	nitrogen expressed as total	aqueous calcium nitrate	

	suspension		nitrate nitrogen	nitrogen;	suspension	
		min. 14% CaO	water-soluble calcium oxide	calcium in the form of a water-soluble salt expressed as calcium oxide		
1.22	nitrogenous fertiliser solution with urea formaldehyde	min. 18% N	total nitrogen; urea-formaldehyde nitrogen; ammoniacal, nitric, and ureic nitrogen, if their content is min. 1%	nitrogen expressed as total nitrogen; min. 33% of the total nitrogen content must be derived from urea formaldehyde;	product obtained chemically, by resolving urea formaldehyde and a straight nitrogen fertiliser from the list of standardised nitrogen fertilisers, except products 1.2.1, 1.2.2, 1.4.1 and 1.4.2	maximum biuret content = ureic and urea-formaldehyde nitrogen content x 0.026
1.23	nitrogenous fertiliser suspension with urea formaldehyde	min. 18% N	total nitrogen; urea-formaldehyde nitrogen; ammoniacal, nitric, and ureic nitrogen, if their content is min. 1%	nitrogen expressed as total nitrogen; min. 33% of the total nitrogen content must be derived from urea formaldehyde, of which min. 60% shall be soluble in hot water;	product obtained chemically, by suspension of urea formaldehyde and a straight nitrogen fertiliser from the list of standardised nitrogen fertilisers, except products 1.2.1, 1.2.2, 1.4.1 and 1.4.2	maximum biuret content = ureic and urea-formaldehyde nitrogen content x 0.026

Nitrification and urease inhibitors allowed under the directly applicable legislation of the European Union concerning fertilisers may be added to nitrogenous fertilisers types in compliance with the approved scope of application of these fertilisers.

b) phosphate fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*

2.1.1	Thomas slag	min. 10% P_2O_5	phosphate soluble in 2 % citric acid	phosphorus compounds expressed as phosphorus pentoxide soluble in 2% citric acid; sieve test: 96% of particles below 0.63 mm 75% of particles below 0.16 mm	calcium silicophosphate; phosphorus ground slag obtained in a steel-making process	phosphorus content may be indicated within the range of 2 % by weight
2.1.2	superphosphate	min. 16% P_2O_5	phosphate soluble in neutral ammonium citrate and water	phosphorus compounds expressed as phosphorus pentoxide soluble in neutral ammonium citrate; at least 93% of the indicated content in water-soluble form	monocalcium phosphate, calcium sulphate; produced by reaction of ground rock phosphate with sulphuric acid	
2.1.3	enriched superphosphate	min. 25% P_2O_5	phosphate soluble in neutral ammonium citrate and water	phosphorus compounds expressed as phosphorus pentoxide soluble in neutral ammonium citrate; at least 93% of the indicated content in water-soluble form	monocalcium phosphate, calcium sulphate; produced by reaction of ground rock phosphate with sulphuric acid and phosphoric acid	
2.1.4	triple superphosphate	min. 38% P_2O_5	phosphate soluble in neutral ammonium citrate and water	phosphorus compounds expressed as phosphorus pentoxide soluble in neutral ammonium citrate; at least 93% of the indicated content in water-soluble form	monocalcium phosphate; obtained by solubilisation of ground rock phosphate with phosphoric acid	
2.2	partially solubilised or enriched phosphate	min. 20% P_2O_5	phosphate soluble in mineral acids and in water	phosphorus compounds expressed as phosphorus pentoxide soluble in mineral acids; at least 40% of the indicated content is soluble in water; sieve test: 98% of particles below 0.63 mm, 90% of particles below 0.16 mm	mono- and tricalcium phosphate, calcium sulphate; partial solubilisation of ground natural phosphate with sulphuric acid or phosphoric acid	
2.3	dicalcium phosphate	min. 38% P_2O_5	phosphate soluble in alkaline ammonium citrate	phosphorus compounds expressed as phosphorus pentoxide soluble in alkaline ammonium citrate; sieve test:	dihydrated dicalcium phosphate; prepared by decomposing mineral phosphates	

				98% of particles below 0.63 mm, 90% of particles below 0.16 mm		
2.4	calcinated phosphate	min. 25% P_2O_5	phosphate soluble in alkaline ammonium citrate	phosphorus compounds expressed as phosphorus pentoxide soluble in alkaline ammonium citrate; sieve test: 96% of particles below 0.63 mm, 75% of particles below 0.16 mm	alkaline tricalcium phosphate, calcium silicate; thermal decomposition of natural phosphate with addition of compounds of alkali and silicic acid	
2.5	aluminium calcium phosphate	min. 30% P_2O_5	phosphate soluble in mineral acids and phosphate soluble in alkaline ammonium citrate	phosphorus compounds expressed as phosphorus pentoxide soluble in mineral acids; min. 75% of the indicated content is soluble in alkaline ammonium citrate; sieve test: 98% of particles below 0.63 mm, 90% of particles below 0.16 mm	aluminium calcium phosphate; thermal decomposition of natural phosphate	
2.6	natural soft phosphorite	min. 25% P_2O_5	phosphate soluble in mineral acids and in 2% formic acid	phosphorus compounds expressed as phosphorus pentoxide soluble in mineral acids; min. 55 % of the indicated content is soluble in 2 % formic acid; sieve test: 99% of particles below 0.125 mm, 90% of particles below 0.063 mm	tricalcium phosphate and calcium carbonate; grinding of soft rock phosphate	passing a 0.063 mm sieve test must be indicated on the fertiliser label

c) potassic fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*

1	*2*	*3*	*4*	*5*	*6*	*7*
3.1	kainite – crude potassium salt	min. 10% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	crude potassium salt ($KCl + MgSO_4$)	
		min. 5% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
3.2	enriched crude potassium salt	min. 18% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	crude potassium salt ($KCl + MgSO_4$) and potassium chloride	water-soluble magnesium oxide content may be indicated if MgO content is min. 5 %
3.3	potassium chloride	min. 37% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	potassium chloride obtained from crude potassium salt	
3.4	potassium chloride with magnesium	min. 37% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	potassium chloride obtained from crude potassium salt with the addition of magnesium salts	
		min. 5% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
3.5	potassium sulphate	min. 47% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	potassium sulphate	chloride content may be indicated max. chloride content 3%
3.6	potassium sulphate with magnesium	min. 22% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	potassium sulphate and magnesium sulphate	chloride content may be indicated max. chloride content 3%
		min. 8% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
3.7	potassium sulphate with kieserite	min. 6% K_2O	water-soluble potassium oxide	potassium in the form of a water-soluble salt expressed as potassium oxide	magnesium sulphate monohydrate (Kieserite) with the addition of potassium sulphate	chloride content may be indicated maximum chloride content 3%
		min. 8% MgO	water-soluble magnesium oxide	magnesium in the form of a water-soluble salt expressed as magnesium oxide		
		total nutrients 20%				

d) fertilisers with calcium, magnesium and sulphur (secondary nutrient fertilisers)

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
4.1	calcium sulphate	min. 14% S	total sulphur	sulphur in the form of a compound soluble in mineral acids expressed as total elemental sulphur	calcium sulphate of various degrees of hydration from natural or industrial sources	
		min. 25% CaO	total calcium oxide	calcium expressed as total calcium oxide		
4.2	calcium chloride – solution	min. 12% CaO	water-soluble calcium oxide	calcium in the form of a water-soluble salt expressed as water-soluble calcium oxide	calcium chloride dissolved in water	the fertiliser label shall include a warning of the fertiliser's herbicidal properties
4.3	sulphur	min. 98% S	total sulphur	elemental sulphur	sulphur from natural or industrial sources	
4.4	kieserite – magnesium sulphate	min. 24% MgO	water-soluble magnesium oxide	magnesium compounds in the form of a water-soluble salt expressed as water-soluble magnesium oxide	magnesium sulfate monohydrate	
		min. 54% SO_4^{-2}	water-soluble sulphate anion	sulphur compounds in the form of a water-soluble salt expressed as water-soluble sulphate anion		
4.5	bitter salt – magnesium sulphate	min. 15% MgO	water-soluble magnesium oxide	magnesium compounds in the form of a water-soluble salt expressed as water-soluble magnesium oxide	magnesium sulphate heptahydrate (bitter salt)	
		min. 33% SO_4^{-2}	water-soluble sulphate anion	sulphur compounds in the form of a water-soluble salt expressed as water-soluble sulphate anion		
4.6	magnesium chloride –	min. 13% MgO	water-soluble	magnesium in the form of a	magnesium chloride with	

	solution		magnesium oxide	water-soluble salt expressed as water-soluble magnesium oxide; maximum calcium content: 2%	calcium chloride dissolved in water	
4.7	magnesium sulphate – solution	min. 5% MgO	water-soluble magnesium oxide	magnesium compounds in the form of a water-soluble salt expressed as water-soluble magnesium oxide	magnesium sulphate dissolved in water	
		min. 12% SO_4^{-2}	water-soluble sulphate anion	sulphur compounds in the form of a water-soluble salt expressed as water-soluble sulphate anion		
4.8	magnesium hydroxide	min. 60% MgO	total magnesium oxide	magnesium hydroxide expressed as total magnesium oxide; sieve test: 99% of particles below 0.063 mm	obtained chemically, containing magnesium hydroxide as its main component	
4.9	magnesium hydroxide – suspension	min. 24% MgO	total magnesium oxide	magnesium hydroxide expressed as total magnesium oxide	water suspension of type 4.8	

2. Mineral compound fertilisers

a) NPK fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
5.1	NPK fertiliser	min. 3% N	nitrogen in forms 1 to 5	nitrogen in forms 2 to 5 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% P_2O_5	phosphate in solubility forms 1 to 8	content data and other requirements as per Table 4; the fineness of grinding of phosphate as per Table 3		
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 20%				
5.2	NPK fertiliser	min. 3% N	nitrogen in forms 1 to 9	nitrogen in forms 2 to 9 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1%;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% P_2O_5	phosphate in solubility forms 1 to 3, 8 and 9	content data and other requirements as per Table 4;		
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 20%				

5.3	NPK fertiliser - coated	min. 3% N	nitrogen in forms 1 to 5	nitrogen in forms 2 to 5 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin; granular fertiliser; the granules shall be coated with a non-toxic material (at least 70 % of the granules shall be treated in this manner);	
		min. 5% P_2O_5	phosphate in solubility forms 1 to 3	content data and other requirements as per Table 4		
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 20%				
5.4	NPK fertiliser – solution	min. 2% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1%; maximum biuret content: ureic nitrogen content x 0.026	product obtained by chemical reaction and by dissolution in water; stable at atmospheric pressure; without the addition of nutrients of organic origin	the fertiliser may be labelled with ‘low biuret content’ if the biuret content does not exceed 0.2%
		min. 3% P_2O_5	phosphate in solubility form 1	content information and other requirements as per Table 4		
		min. 3% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 15%				
5.5	NPK fertiliser - suspension	min. 3% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1%; maximum biuret content: ureic nitrogen content x 0.026	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	the fertiliser may be labelled with ‘low biuret content’ if the biuret content does not exceed 0.2%
		min. 4% P_2O_5	phosphate in solubility forms 1 to 3	content information and other requirements as per Table 4		

		min. 4% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 20%				
5.6	NPK fertiliser with crotonylidene diurea or isobutylidene diurea or urea-formaldehyde	min. 5% N	nitrogen in forms 1 to 8, except form 5	nitrogen in forms 2 to 4 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1%; at least 25% of the total nitrogen content must be bound in forms 6, 7 or 8 (as per Table 1); at least 60% of nitrogen in form 7 must be soluble in hot water	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin contains crotonylidene diurea or isobutylidene diurea or urea formaldehyde	
		min. 5% P_2O_5	phosphate in solubility forms 1 to 3	content data and other requirements as per Table 4		
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 20%				

b) NP fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
6.1	NP fertiliser	min. 3% N	nitrogen in forms 1 to 5	nitrogen in forms 2 to 5 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	

		min. 5% P_2O_5	phosphate in solubility forms 1 to 8	content data and other requirements as per Table 4		
		total nutrients 18%				
6.2	NP fertiliser - solution	min. 3% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1%;	product obtained by chemical reaction and by dissolution in water; stable at atmospheric pressure; without the addition of nutrients of organic origin	maximum biuret content: ureic nitrogen content x 0.026; the fertiliser may be labelled with 'low biuret content' if the biuret content does not exceed 0.2%
		min. 5% P_2O_5	phosphate in solubility form 1			
		total nutrients: 18 %				
6.3	NP fertiliser - suspension	min. 3% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	maximum biuret content: ureic nitrogen content x 0.026; the fertiliser may be labelled as 'low in biuret' if the biuret content does not exceed 0.2 %
		min. 5% P_2O_5	phosphate in solubility forms 1 to 3	content data and other requirements as per Table 4		
		total nutrients: 18%				
6.4	NP fertiliser with crotonylidene urea or isobutylidene urea or urea formaldehyde	min. 5% N	nitrogen of forms 1 to 8, except 5	nitrogen in forms 2 to 4 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %; at least 25% of the total nitrogen content must be bound in forms 6, 7 or 8 (as per Table 1); at least 60 % of nitrogen in form 7 shall be soluble in hot water	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin contains crotonylidene diurea or isobutylidene diurea or urea formaldehyde	
		min. 5% P_2O_5	phosphate in	content data and other		

			solubility forms 1 to 9	requirements as per Table 4		
		total nutrients: 18 %				

c) NK fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
7.1	NK fertiliser	min. 3% N	nitrogen in forms 1 to 5	nitrogen in forms 2 to 5 (as per Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 18%				
7.2	NK fertiliser - solution	min. 3% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	maximum biuret content: ureic nitrogen content x 0.026
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients: 15%				
7.3	NK fertiliser - suspension	min. 3% N	nitrogen in forms 1 to 4	nitrogen in forms 2 to 4 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %;	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	maximum biuret content: ureic nitrogen content x 0.026

		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients: 15%				
7.4	NK fertiliser with crotonylidene urea or isobutylidene urea or urea formaldehyde	min. 5% N	nitrogen of forms 1 to 8, except 5	nitrogen in forms 2 to 4 (according to Table 1) may be included in the product label only if its content in the fertiliser exceeds 1 %; at least 25% of the total nitrogen content must be bound in forms 6, 7 or 8 (as per Table 1); at least 60 % of nitrogen in form 7 shall be soluble in hot water	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin contains crotonylidene diurea or isobutylidene diurea or urea formaldehyde	
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients: 18 %				

d) PK fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
8.1	PK fertiliser	min. 5% P_2O_5	phosphate in solubility forms 1 to 9	content information and other requirements as per Table 4	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients				

		18%				
8.2	PK fertiliser - solution	min. 5% P_2O_5	phosphate in solubility form 1		product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 18%				
8.3	PK fertiliser - suspension	min. 5% P_2O_5	phosphate in solubility forms 1 to 3	content data and other requirements as per Table 4	product obtained by chemical reaction or mixing; without the addition of nutrients of organic origin	
		min. 5% K_2O	water-soluble potassium oxide	water-soluble potassium compounds expressed as potassium oxide		
		total nutrients 18%				

Nitrification and urease inhibitors permitted under directly applicable European Union fertiliser provisions may be added to compound mineral fertiliser types (5.1-7.4) in accordance with their approved range of application.

3. Mineral fertilisers containing only micro-nutrients as the type-defining component

a) **Solid or fluid mixtures of micro-nutrient fertilisers**

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
9.1	mixture of micro-nutrients in solid form	total micronutrients 5%	total content of each micro-nutrient; water-soluble content of each micro-nutrient where the soluble content is at least half of the total content; where a micro-nutrient is totally water-	the total and/or water-soluble content of each trace nutrient	a product obtained by mixing two or more fertilisers of type 3 b)	if the micro-nutrient is bound in a chelate, the chelating agent and the proportion of the water-soluble content bound in chelate form must be indicated

			soluble, only the water-soluble content shall be declared			
9.2	a mixture of trace nutrients in liquid form	total micronutrients 2%	total content of each micro-nutrient; water-soluble content of each micro-nutrient where the soluble content is at least half of the total content; where a micro-nutrient is totally water-soluble, only the water-soluble content shall be declared	the total and/or water-soluble content of each trace nutrient	product obtained by dissolving and/or suspending two or more fertilisers of type 3 b) in water	if the micro-nutrient is bound in a chelate, the chelating agent and the proportion of the water-soluble content bound in chelate form be indicated.

b) **Fertilisers containing only one micro-nutrient**

Boron

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
10.1	boric acid	min. 14% B	water-soluble boron	boron expressed as water-soluble boron	boric acid obtained by the action of an acid on a borate	the fertiliser label must include the information: ‘For professional use only’.
10.2	sodium borate	min. 10% B	water-soluble boron	boron expressed as water-soluble boron	sodium borate or sodium tetraborate or sodium octaborate	the fertiliser label must include the information: ‘For professional use only’.
10.3	calcium borate	min. 7% B	total boron	boron expressed as total boron; min. 98% of particles below 0.063 mm	calcium borate from colemanite or pandermite	

10.4	boron ethanolamine	min. 8% B	water-soluble boron	boron expressed as water-soluble boron	obtained from the reaction of boric acid with an ethanol amine	
10.5	boron – fertiliser in solution	min. 2% B	water-soluble boron	boron expressed as water-soluble boron	boron ethanolamine, sodium borate or boric acid dissolved in water	the fertiliser label must include the information: ‘For professional use only’. excluding fertilisers containing boretanolamine.
10.6	boron – suspension fertiliser	min. 2% B	water-soluble boron	boron expressed as water-soluble boron	boron ethanolamine, sodium borate or boric acid suspension in water	the fertiliser label must include the information: ‘For professional use only’. excluding fertilisers containing boretanolamine.

Cobalt

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
11.1	cobalt salt	min. 19% Co	water-soluble cobalt	cobalt expressed as water-soluble cobalt	cobalt salt	the fertiliser label shall indicate the salt anion used
11.2	cobalt chelate	min. 2% Co	water-soluble cobalt	cobalt expressed as water-soluble cobalt min. 80% of the indicated cobalt content must be in chelate form	cobalt chelate	the fertiliser label must include the chelating agent and the proportion of the water-soluble content bound in chelate form
11.3	cobalt – fertiliser in solution	min. 2% Co	water-soluble cobalt	cobalt expressed as water-soluble cobalt	solution of cobalt salt or cobalt chelate in water	the salt anion shall be indicated; the chelating agent and the proportion of the water-soluble content bound in chelate

						form shall be indicated

Copper

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
12.1	copper salt	min. 20% Cu	water-soluble copper	copper expressed as water-soluble copper;	copper salt	the fertiliser label shall indicate the salt anion used
12.2	copper(II) oxide	min. 70% Cu	total copper	copper expressed as total copper; min. 98% of particles below 0.063 mm	copper(II) oxide	
12.3	copper(II) hydroxide	min. 45% Cu	total copper	copper expressed as total copper; min. 98% of particles below 0.063 mm	copper(II) hydroxide	
12.4	copper chelate	min. 9% Cu	water-soluble copper	copper expressed as water-soluble copper; min. 80% of the indicated copper content must be in chelate form	copper chelate	the fertiliser label must indicate the chelating agent and the proportion of the water-soluble content bound in chelate form
12.5	copper-based fertiliser	min. 5% Cu	total copper	copper expressed as total copper; min. 98% of particles below 0.063 mm	mixture of copper salts, copper(II) oxide, copper hydroxide or chelate, and a non-toxic carrier	the fertiliser label must indicate the chelating agent and the proportion of the total content bound in chelate form; water-soluble copper content may be indicated if it accounts for at least 25% of the total content

12.6	copper - fertiliser in solution	min. 3% Cu	water-soluble copper	copper expressed as water-soluble copper;	dissolution of copper salt or copper chelate in water	the fertiliser label must indicate the chelating agent and the proportion of the water-soluble content bound in chelate form
12.7	copper oxychloride	min. 50% Cu	total copper	copper expressed as total copper; min. 98% of particles below 0.063 mm	copper oxychloride	the fertiliser label must include a warning regarding its herbicidal properties
12.8	copper oxychloride – suspension	min. 17% Cu	total copper	copper expressed as total copper	copper oxychloride suspension in water	

Iron

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
13.1	iron salt	min. 12% Fe	water-soluble iron	iron expressed as water-soluble iron	bivalent iron salt	the fertiliser label shall indicate the anion of the salt used; the fertiliser label shall include a warning of its herbicidal properties
13.2	iron chelate	min. 5% Fe	water-soluble iron	iron expressed as water-soluble iron minimally 80% of the indicated content of iron must be in chelate form	iron chelate	the fertiliser label shall indicate the chelating agent and the proportion of the water-soluble content bound in chelate form
13.3	iron fertiliser in solution	min. 2% Fe	water-soluble iron	iron expressed as water-soluble iron	aqueous iron salt or iron chelate solution	the fertiliser label must indicate the chelating agent and the proportion of the water-soluble

						content bound in chelate form

Manganese

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
14.1	manganese salt	min. 17% Mn	water-soluble manganese	manganese expressed as water-soluble manganese	manganese salt (with bivalent manganese)	the fertiliser label must indicate the anion of the salt used
14.2	manganese chelate	min. 5% Mn	water-soluble manganese	manganese expressed as water-soluble manganese; min. 80% of the indicated manganese content must be in chelate form	manganese chelate	the fertiliser label must indicate the chelating agent and the proportion of the water-soluble content bound in chelate form
14.3	manganese oxide	min. 40% Mn	total manganese	manganese expressed as total manganese; min. 80% of particles below 0.063 mm	manganese oxide	
14.4	manganese-based fertiliser	min. 17% Mn	total manganese	manganese expressed as total manganese	mixture of manganese salt and manganese oxide	water-soluble manganese content may be indicated if it accounts for at least 25 % of the total content
14.5	manganese – fertiliser in solution	min. 3% Mn	water-soluble manganese	manganese expressed as water-soluble manganese	manganese or manganese chelate solution in water	the fertiliser label shall indicate the chelating agent and the proportion of the water-soluble content bound in chelate form

Molybdenum

type	*type designation*	required value	*components defining the type, forms and solubility*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*

			of nutrients			
1	*2*	*3*	*4*	*5*	*6*	*7*
15.1	sodium molybdate	min. 35% Mo	water-soluble molybdenum	molybdenum expressed as water-soluble molybdenum	sodium molybdate	
15.2	ammonium molybdate	min. 50% Mo	water-soluble molybdenum	molybdenum expressed as water-soluble molybdenum	ammonium molybdate	
15.3	molybdenum-based fertiliser	min. 35% Mo	water-soluble molybdenum	molybdenum expressed as water-soluble molybdenum	sodium molybdate and ammonium molybdate mixture	
15.4	molybdenum fertiliser in solution	min. 3% Mo	water-soluble molybdenum	molybdenum expressed as water-soluble molybdenum	sodium molybdate or ammonium molybdate solution in water	

Zinc

type	*type designation*	required value	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
16.1	zinc salt	min. 15% Zn	water-soluble zinc	zinc expressed as water-soluble zinc	zinc salt	the fertiliser label must indicate the anion of the salt used
16.2	zinc chelate	min. 5% Zn	water-soluble zinc	zinc expressed as water-soluble zinc	zinc chelate	the fertiliser label shall indicate the chelating agent and the proportion of the water-soluble content bound in chelate form
16.3	zinc oxide	min. 70% Zn	total zinc	zinc expressed as total zinc; min. 80% of particles below 0.063 mm	zinc oxide	
16.4	zinc-based fertiliser	min. 30% Zn	total zinc	zinc expressed as total zinc	zinc salt and zinc oxide	water-soluble zinc content

					mixture	may be indicated if it accounts for at least 25 % of the total content
16.5	zinc – fertiliser in solution	min. 3% Zn	water-soluble zinc	zinc expressed as water-soluble zinc	zinc salt or zinc chelate solution in water	the fertiliser label shall indicate the chelating agent and the proportion of the water-soluble content bound in chelate form

4. Calcium and magnesium-calcium fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	2	3	4	5	6	7
17.1.1	limestone	65% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$, max. 4.6%, relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$; Particle size: type A: particles between 0.09 and 0.5 mm, min. 90% type B: particles below 0.5 mm, min. 90% type C: particles below 1 mm min. 90%	calcium carbonate and magnesium carbonate prepared by grinding carbonate rock (natural limestone)	Maximum rate of application is 3.4 tonnes per $ha^{-1}.year^{-1}$ Types B and C cannot be used for pneumatic distribution by tankers.
17.1.2	dolomite limestone	65% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$ 4.6 to 22.9 %, relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$; Particle size: type A: particles between 0.09 and 0.5 mm, min. 90% type B: particles below 0.5 mm, min. 90% type C: particles below 1 mm	calcium carbonate and magnesium carbonate treated by grinding from carbonate rock (natural dolomitic limestone)	Maximum rate of application is 3.4 tonnes per $ha^{-1}.year^{-1}$ Types B and C cannot be used for pneumatic distribution by tankers.

				min. 90%		
17.1.3	calcareous dolomite	65% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$ 22.9 to 41.2%, relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$; Particle size: type A: particles between 0.09 and 0.5 mm, min. 90% type B: particles below 0.5 mm, min. 90% type C: particles below 1 mm min. 90%	calcium carbonate and magnesium carbonate treated by grinding of carbonate rock (natural calcareous dolomite)	Maximum rate of application is 3.4 tonnes per $ha^{-1}.year^{-1}$ Types B and C cannot be used for pneumatic distribution by tankers.
17.1.4	dolomite	65% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$ min. 41.2%, relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$ Particle size: type A: particles between 0.09 and 0.5 mm, min. 90% type B: particles below 0.5 mm, min. 90% type C: particles below 1 mm min. 90%	calcium carbonate and magnesium carbonate treated by grinding of carbonate rock (natural dolomite)	Maximum rate of application is 3.4 tonnes per $ha^{-1}.year^{-1}$ Types B and C cannot be used for pneumatic distribution by tankers.
17.1.5	dolomite	95% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$ min. 35.0%, relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$ Particle size: particles over 3.15 mm: max. 1.0% particles over 1.0 mm: max. 30%	calcium carbonate and magnesium carbonate prepared by extraction (without drying) of carbonate rock (natural dolomite)	Maximum rate of application is 3.4 tonnes per $ha^{-1}.year^{-1}$
17.2.1	white burnt lime	55% CaO + MgO of which MgO max. 7.0%	calcium oxide and magnesium oxide	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$	calcium oxide and magnesium oxide, from natural carbonate rock prepared by burning and	Maximum rate of application is 1.7 tonnes.$ha^{-1}.year^{-1}$

				Particle size: type A: particles between 0.5 and 1.0 mm, min. 90% type B: particles below 1.0 mm, min. 90%	grinding	Type B cannot be used for pneumatic spreading with tankers.
17.2.2	dolomitic burnt lime	55% CaO + MgO of which MgO min. 7.0%	calcium oxide and magnesium oxide	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$ Particle size: type A: particles between 0.5 and 1.0 mm, min. 90% type B: particles below 1.0 mm, min. 90%	calcium oxide and magnesium oxide, from natural carbonate rock prepared by burning and grinding	Maximum rate of application is 1.7 tonnes.ha^{-1}.$year^{-1}$ Type B cannot be used for pneumatic spreading with tankers.
17.3	sugar lime	max 42.0% min. 35.0%	moisture neutralising value	neutralising value in % CaO in dry matter	Product from sugar production obtained by carbonation using exclusively burnt lime from natural sources and containing finely divided calcium carbonate as essential ingredient	Maximum rate of application is 20 tonnes.ha^{-1}.$year^{-1}$
17.4	chalk	65% $CaCO_3$ + $MgCO_3$ of which $MgCO_3$, max. 4.6% relative	calcium carbonate and magnesium carbonate	calcium expressed in $CaCO_3$; magnesium expressed in $MgCO_3$ Particle size: particles below 3.15 mm: min. 90% particles below 2 mm: min. 70%	Product containing calcium carbonate as its main component, obtained by grinding of natural chalk deposits.	Maximum rate of application is 3.4 tonnes per ha^{-1}.$year^{-1}$

				particles below 0.3 mm: min. 40%		

Fertilisers corresponding to types 17.1.1 – 17.2.2 are also considered to be standardised fertilisers when in granular form provided that when stirred in water the granules break down into particles with fineness distribution corresponding to the relevant type.

5. Organic fertilisers

type	*type designation*	*required value*	*components defining the type, forms and solubility of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
18.1	vermicompost	min. 35%	combustible materials	combustible materials in dry matter expressed as loss on ignition	Biowaste processing using earthworms List of permissible materials: manure hay straw grass leaves fruit vegetables grape marc fruit pulp plant biomass woodchips, sawdust and shavings from chemically untreated wood used coconut and peat growing media free of soil dried beet chips type-appropriate digestate separator 18.6	if animal by-products are used, it is subject to approval by the Regional Veterinary Administration of the SVA (State Veterinary Administration)
		min. 1%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 0.7%	total phosphorus	phosphorus expressed as total phosphorus pentoxide in dry matter		
		min. 1%	total potassium	potassium expressed as total potassium oxide in dry matter		
18.2	molasses stillage	min. 65%	combustible	combustible materials in dry		

			materials	matter expressed as loss on ignition		
		min. 3%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 8%	total potassium	potassium expressed as total potassium oxide in dry matter		
18.3	distillery residues	3-13%	dry matter		fertiliser obtained as a residue of the fermentation and distillation of fruit, a residue of distillation from waste starch, a residue of distillation from the production of alcohol from cereals; the pH value is adjusted by liming	
		min. 0.1%	total nitrogen	nitrogen expressed as total nitrogen in the sample		
		min. 0.2%	total potassium	potassium expressed as total potassium oxide in the sample		
		6.0 – 8.0	pH	pH in aqueous extract		
18.4	digestate	3-13%	dry matter		fertilisers produced from anaerobic fermentation in biogas production	exclusively from feed and manure if animal by-products are used, it is subject to approval by the Regional Veterinary Administration of the SVA (State Veterinary Administration)
		min. 0.3%	total nitrogen	nitrogen expressed as total nitrogen in the sample		

18.5	digestate liquor	less than 3%	dry matter		fertilisers produced from anaerobic fermentation in biogas production, the liquid fraction after separation; by its nature, it may exhibit the action of mineral fertilisers	exclusively from feed and manure if animal by-products are used, it is subject to approval by the Regional Veterinary Administration of the SVA (State Veterinary Administration)
		min. 0.1%	total nitrogen	nitrogen expressed as total nitrogen in the sample		
18.6	fibre digestate liquor digestate	more than 13%	dry matter		fertilisers produced by anaerobic fermentation in biogas production; fibre digestate is the solid fraction after separation	exclusively from feed and manure if animal by-products are used, it is subject to approval by the Regional Veterinary Administration of the SVA (State Veterinary Administration)
		min. 0.5%	total nitrogen	nitrogen expressed as total nitrogen in the sample		
18.7	dried bovine manure	min. 85%	dry matter		granulated or pelleted bovine manure	uric acid content max. 0.2% in the sample subject to approval by the Regional Veterinary Administration of the SVA
		min. 70%	combustible materials	combustible materials in dry matter expressed as loss on ignition		
		min. 2%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 1%	total phosphorus	phosphorus expressed as total phosphorus pentoxide in dry matter		
		min. 2%	total potassium	potassium expressed as total potassium oxide in dry matter		

18.8	dried poultry manure	min. 85%	dry matter		granulated or pelleted poultry manure	subject to approval by the Regional Veterinary Administration of the SVA
		min. 70%	combustible materials	combustible materials in dry matter expressed as loss on ignition		
		min. 4%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 2.5%	total phosphorus	phosphorus expressed as total phosphorus pentoxide in dry matter		
		min. 2.5%	total potassium	potassium expressed as total potassium oxide in dry matter		
18.9	dried horse manure	min. 85%	dry matter		granulated or pelleted horse manure	uric acid content max. 0.2% in the sample subject to approval by the Regional Veterinary Administration of the SVA
		min. 70%	combustible materials	combustible materials in dry matter expressed as loss on ignition		
		min. 2%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 1%	total phosphorus	phosphorus expressed as total phosphorus pentoxide in dry matter		
		min. 2%	total potassium	potassium expressed as total potassium oxide in dry matter		
18.10	faeces of the yellow mealworm beetle (mealworm)	min. 80%	dry matter		loose or pelleted material containing a mixture of excrement, feed substrate, parts of insects and dead eggs of the yellow mealworm beetle	material derived exclusively from the processing of herbal material by the yellow mealworm beetle *Tenebrio molitor* (mealworm) subject to approval by the SVA (Regional Veterinary Administration)
		min. 80%	combustible materials	combustible materials in dry matter expressed as loss on ignition		
		min. 3%	total nitrogen	nitrogen expressed as total nitrogen in dry matter		
		min. 3%	total phosphorus	phosphorus expressed as total phosphorus pentoxide in dry matter		
		min. 2.5%	total potassium	potassium expressed as total potassium oxide in dry matter		

6. Growing media

type	*type designation*	*required value*	*type-defining components*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
19.1	peat	max. 0.2 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		3.0–5.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 55%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.2	growing media for propagation, sowing and for plants with low nutrient needs	max. 0.35 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	List of permissible materials: Peat Processed wood Rice polishings Cocoa husks Coconut products (e.g. coconut fibres and chips) Clays and clay materials Expanded clays (e.g. ceramic aggregates) Perlite Vermiculite Lava Pumice Mineral felts Sand Stone grit and meal Zeolite Soils Bark Composted bark Compost obtained by composting vegetable matter and/or manure exclusively	Any fertilisers and soil improvers that may be legally marketed in the Czech Republic may be used to enrich and add nutrients to growing media.
		5.0–7.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 45.0%	combustible materials in dried sample	combustible materials in dry matter determined as loss on ignition		
19.3	growing media for plants with medium or higher nutrient needs	0.2 – 0.65 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.0–7.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 45.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.4	substrates for acidophilic plants	max. 0.5 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		3.0–5.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 45.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.5	orchid growing media	max. 0.4 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.0–7.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 50.0%	combustible materials	combustible materials in dry matter		

			in dried sample	expressed as loss on ignition	Cork Straw Spongolite Plant-based ingredients (flax, jute, cotton, vegetable fibres) Limestone Guano Fibre digestate corresponding to type 18.6	
19.6	Growing media for cacti, succulents and xerophytic plants	max. 0.5 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.0–8.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		min. 30.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.7	growing media with a higher proportion of mineral components	max. 0.6 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.0–7.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		10.0–55.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.8	growing media based on mineral components	max. 0.65 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.5–9.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.0–8.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
		max 15.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
19.9	growing media with the addition of long-acting fertilisers	include types 19.2–19.8; pH and combustible material levels always correspond to the relevant type; the name of the fertiliser used, the fertiliser dose per kg/m^3 of growing media and the date of application of the fertiliser must be indicated.				

19.10	soils	max. 0.5 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038		
		5.5–9.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.0–8.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
		max 15.0%	combustible materials in dried sample	combustible materials in dry matter expressed as loss on ignition		
		max. 10.0%	particles above 31.5 mm			

7. Soil improvers

type	*type designation*	*required value*	*type-defining components, forms of nutrients*	*components subject to evaluation and other requirements*	*composition, method of production*	*special provisions*
1	*2*	*3*	*4*	*5*	*6*	*7*
20.1	process water	max 1.5%	dry matter		obtained exclusively from livestock farming and simple processing of plant products, without added substances	maximum rate of application is 50 tonnes per $ha^{-1}.year^{-1}$
		max 0.1%	total nitrogen	nitrogen expressed as total nitrogen in the sample		
20.2	ceramic aggregates (keramsite)	max. 0.3 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	expanded Cypris clay and mudstone produced at very high temperatures	not applicable to mulching materials
		6.0–10.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–9.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		

20.3	crushed ceramic aggregates	max. 0.3 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	expanded Cypris clay and mudstone produced at very high temperatures with subsequent crushing	not applicable to mulching materials
		6.0–10.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–10.0	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
20.4	lava	max. 0.1 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	igneous rock of volcanic origin, processed by crushing	not applicable to mulching materials
		6.0–9.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–8.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
20.5	pumice	max. 0.1 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	highly porous igneous rock (volcanic glass) processed by crushing	not applicable to mulching materials
		6.0–9.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–8.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
20.6	perlite	max. 0.1 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	porous expanded igneous rock (volcanic glass) with high water content processed by crushing	not applicable to mulching materials
		6.0–9.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–8.5	pH	pH in $CaCl_2$ solution extract pursuant to ČSN EN 10390		
20.7	vermiculite	max. 0.3 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	thermally exfoliated phylosilicate mineral obtained by expansion of non-exfoliated vermiculite with possible processing by crushing	not applicable to mulching materials
		4.0–6.0	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		3.0–5.5	pH	pH in a $CaCl_2$ solution extract pursuant to ČSN EN 10390		

20.8	zeolite	max. 0.5 mS/cm	electrical conductivity	electrical conductivity according to ČSN EN 13038	hydrated aluminosilicate mineral of natural origin produced by crushing and drying	not applicable to mulching materials
		6.0–8.5	pH	pH in aqueous extract pursuant to ČSN EN 13037		
		5.5–8.0	pH	pH in a $CaCl_2$ solution extract pursuant to ČSN EN 10390		

Table 1 is used for fertilisers types 1.1.1–1.23 and 5.1–7.4:

Table 1
Forms of nitrogen

number	form
1	total nitrogen
2	nitrate nitrogen
3	ammoniacal nitrogen
4	ureic nitrogen
5	cyanamide nitrogen
6	isobutylidenediurea nitrogen;
7	urea formaldehyde nitrogen
8	crotonylidene-diureic nitrogen
9	dicyanodiamide nitrogen

Tables 2 and 3 are used for fertiliser types 2.1.1–2.6, 5.1–6.4 and 8.1–8.3:

Table 2
solubility of phosphates (as P_2O_5)

number	form
1	soluble in water as P_2O_5
2	soluble in neutral ammonium citrate as P_2O_5
3	soluble in water and neutral ammonium citrate as P_2O_5
4	only soluble in mineral acid as P_2O_5
5	soluble in alkaline ammonium citrate (Petermann) as P_2O_5
6	soluble in 2% citric acid as P_2O_5
7	soluble in mineral acid; at least 75% of this amount is soluble in alkaline ammonium citrate (Joulie) as P_2O_5
8	soluble in mineral acid; at least 55% of this amount is soluble in 2% formic acid as P_2O_5
9	soluble in mineral acid; at least 55% of this amount is soluble in 2% formic acid and at least 20% is soluble in water as P_2O_5
10	soluble in 2% citric acid and in alkaline ammonium citrate (Petermann) as P_2O_5

Table 3
Fineness of grinding (expressed as sifted fraction)

name	sifted fraction in % by weight	sieve size in mm
aluminium calcium phosphate	90	0.16
thermophosphate	75	0.16
partially solubilised phosphate	90	0.16
Thomas slag	75	0.16
natural soft phosphorite	90	0.063

Table 4 is used for fertiliser types 5.1–6.4 and 8.1–8.3:

Table 4
Content information and other requirements for the phosphorus component of mineral compound fertilisers.

1	2	3	4	5
compound fertilisers containing:	**the type designation must be accompanied by the information:**	**solubility data as per Table 2 (number)**	**min. soluble content in % by wt.**	**Fertilisers shall not contain**
less than 2% of water-soluble phosphate as P_2O_5		2		Thomas slag, thermophosphate, aluminium calcium phosphate, partially solubilised phosphate
2% or more of water-soluble phosphate as P_2O_5		1, 3		soft ground rock phosphate
soft ground rock phosphate with water-soluble components	‘natural soft phosphorite with water-soluble components’	9	solubility 1:2	other types of phosphates
Thomas slag next to thermophosphate, monocalcium phosphate or dicalcium phosphate	‘contains available phosphate’	10		phosphate types other than those listed in column 1
dicalcium phosphate	‘contains dicalcium phosphate’	5		other types of phosphates

Table 5 is used for fertilisers type 1 to 8.3:

Table 5:
Micro-nutrients added to straight and compound mineral fertilisers
Micro-nutrients may be declared only if their content is at least:

for crop land and pastures	for gardening or foliar application
0.01% B	0.01% B
0.002% Co	0.002% Co
0.01% Cu	0.002% Cu
0.5% Fe	0.02% Fe
0.1% Mn	0.01% Mn
0.001% Mo	0.001% Mo
0.01% Zn	0.002% Zn

Table 6
Chelating agents
The chelating agents (i.e. acids or their sodium, potassium or ammonium salts) listed in the table may be used in fertiliser types 5.1-9.2, 11.2-14.5 and 16.2-16.5.

Composition and designation of the chelating agent	
ethylenediaminetetraacetic acid	EDTA
N'-(2-hydroxyethyl)ethylenediamine-N,N,N'-triacetic acid	HEEDTA
diethylenetriaminepentaacetic acid	DTPA
ethylenediamine-N,N′-bis(2-hydroxyphenylacetic acid)	[o,o]-EDDHA
ethylenediamine-N-(2-hydroxyphenylacetic acid)-N'-(4-hydroxyphenylacetic acid)	[o,p]-EDDHA
ethylenediamine-N,N'-bis(2-hydroxymethylphenylacetic acid)	[o,o]-EDDHMA
ethylenediamine-N-(2-hydroxymethylphenylacetic acid)-N'-(4-hydroxymethylphenylacetic acid)	(o,p) EDDHMA
ethylenediamine-N,N'-bis(2-hydroxy-5-carboxoxyphenylacetic acid)	EDDCHA
ethylenediamine-di-(2-carboxy-5-sulphophenylacetic acid) and its derivatives	EDDHSA
iminodisuccinic acid	IDHA
N,N'-di(2-hydroxybenzyl)ethylenediamine-N,N'-diacetic acid	HBED
[S,S]-ethylenediaminedisuccinic acid	[S, S]-EDDS

Identification of nutrients

1.

in words:	**by chemical symbol:**	**in words:**	**by chemical symbol:**
Nitrogen	N	Sulphate anion	SO_4^{2-}
Phosphorus	P	Boron	B
Phosphorus pentoxide	P_2O_5	Iron	Fe
Potassium	K	Cobalt	Co
Potassium oxide	K_2O	Copper	Cu
Calcium	Ca	Manganese	Mn
Calcium oxide	CaO	Molybdenum	Mo
Calcium carbonate	$CaCO_3$	Zinc	Zn
Magnesium	Mg	Sodium	Na
Magnesium oxide	MgO	Sodium oxide	Na_2O
Magnesium carbonate	$MgCO_3$	Sulphur	S
Silicon dioxide	SiO_2	Sulphur trioxide	SO_3:
Silicon	Si		

2.

In the case of phosphorus, potassium, calcium, magnesium and sulphur, the content of the element may be indicated along with the indication of the oxide or carbonate form. The contents of elements are subject to the following conversions:			
P_2O_5	0.436	P	(phosphorus)
K_2O	0.830	K	(potassium)
CaO	0.715	Ca	(calcium)
$CaCO_3$	0.400	Ca	(calcium)
$CaCO_3$	0.560	CaO	(calcium oxide)
MgO	0.603	Mg	(magnesium)
$MgCO_3$	0.288	Mg	(magnesium)
$MgCO_3$	0.478	MgO	(magnesium oxide)
SO_4^{2-}	0.333	S	(sulphur)
SO_3	0.4	S	(sulphur)
Na_2O	0.742	Na	(sodium)
SiO_2	0.467	Si	(silicon)

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Article II

Final provisions

This Implementing Decree was notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

Article III

Effective date

This Decree takes effect on 1 October 2024.

Minister of Agriculture: