

Procedures for the Control Sampling of Fertilisers and Growing Media, and for Sample Preparation

*Issued pursuant to
Section 4, Paragraph one, Clause 2 of the Law on Circulation of Fertilisers*

I. General Provisions

1. This Regulation prescribes the requirements for control sampling of fertilisers and growing media (hereinafter – the substrate), as well as the procedures by which the State Plant Protection Service (hereinafter – the Service) takes and prepares control samples of fertilisers and substrates for the quality conformity inspection thereof.

2. The following terms are used in this Regulation:

2.1. sample lot – the total amount of fertiliser or substrate as homogeneous as possible from which control samples are taken;

2.2. initial sample – the amount of fertiliser or substrate which is taken at one place. Initial samples shall be randomly taken from the entire sample lot, and they shall be approximately of one size;

2.3. composite sample (aggregate sample) – combination of initial samples of the sample lot;

2.4. final sample – a representative part of the composite sample (aggregate sample). The final sample is obtained by carefully stirring a composite sample (aggregate sample) and, where necessary, by reducing the initial mass of the composite sample.

3. In respect of the fertilisers with marking “EC fertiliser” for which a sample is taken in accordance with the requirements laid down in Annex 4 of Regulation (EC) No 2003/2003 of the European Parliament and of the Council of 13 October 2003 relating to fertilisers (hereinafter – Regulation No. 2003/2003) only Paragraphs 19, 20, 21, 22, and 23 of this Regulation shall apply.

II. Sampling Devices

4. A sampling device shall be manufactured of the material which does not affect the qualitative properties of the sample taken for testing and which can be sterilised for taking such samples for which microbiological testing is necessary.

5. The following devices shall be used for sampling liming materials, solid fertilisers and substrates:

5.1. for manual sampling – a flat bottom shovel with steep sides or sampling probe with a long cut or compartments. Probe and cut size shall comply with the granulometric composition and packaging size of the fertiliser and substrate to be inspected;

5.2. for mechanical sampling from the flow of fertilisers and substrates mechanical devices shall be used;

5.3. for the division of a sample in equal parts and preparation of a final sample a special sample dividing device shall be used.

6. The following devices shall be used for sampling liquid fertilisers:

6.1. for manual sampling – a pipette, cup, bottle, measuring cup or other device;

6.2. for mechanical sampling from the flow of liquid fertilisers mechanical devices shall be used.

III. Quantity Requirements of a Sample

7. The minimum number of initial samples shall be determined by taking into account the type of the fertiliser and substrate, the size of the sample lot and mass of packaging (Annex 1).

8. A composite sample (aggregate sample) shall be created from initial samples by taking into account the minimum mass of the composite sample (Annex 2).

9. A final sample shall be created from the composite sample (aggregate sample) by taking into account the minimum mass of the composite sample (Annex 3) and, where necessary, by reducing the composite sample.

IV. Sampling and Sample Preparation

10. A sample shall be taken and prepared as quickly as possible by complying with the necessary precaution in order to ensure conformity of the sample with the composition of the fertiliser and substrate. The likelihood of pollution of fertiliser and substrate shall be prevented during sampling.

11. Sampling devices, surfaces and containers intended for samples shall be clean and dry.

12. A liquid fertiliser shall be stirred in the entire volume before sampling. If it is not possible, a sample shall be taken during loading or unloading of a sample lot.

13. Sampling devices with which samples are taken for microbiological analyses shall be sterile (for example, treated with 70–80 per cent alcoholic solution if they are made of plastics, glass or metal, or treated with flame or boiling, if they are made of metal).

14. When taking the initial sample from unpacked fertilisers and substrates or packed fertilisers and substrates the packaging of which is larger than 100 kilograms, a sample lot shall be visually divided in approximately equal parts the number of which complies with the initial number of samples (Annex 1), and at least one initial sample shall be randomly taken from each such part. If during sampling it is not possible to take samples from all parts of the sample lot, a sample shall be taken during loading or unloading of the sample lot. In such case samples shall be randomly taken from the selected parts which have been previously determined while the sample is in movement.

15. If it is necessary to reduce a composite sample (aggregate sample), its mass shall be reduced by a mechanical divider or according to quartering (diagonal) method up to the mass laid down in Annex 3 to this Regulation. Three final samples shall be prepared from the composite sample (aggregate sample).

16. A final sample shall be placed in a clean, dry, watertight hermetically closeable packaging in which a sample can be stored in its initial condition. Final samples which are intended:

16.1. for the inspection of the test of resistance to detonation of ammonium nitrate shall be kept in a temperature of 0–25 °C;

16.2. for microbiological analyses shall be kept in a temperature of 5 °C (± 3 °C).

17. Final samples shall be weighed, marked and stamped (sealed) so as they could not be opened without damaging a stamp (seal).

18. The Service shall draw up a sampling record regarding sampling each fertiliser or substrate (Annex 4).

19. A sampling record for the fertiliser with marking “EC fertiliser” shall be drawn up in accordance with Annex 4, section A, paragraph 8 of Regulation No. 2003/2003 (Annex 4).

20. The record referred to in Paragraphs 18 and 19 of this Regulation shall be drawn up in two copies. One copy shall remain with the Service, the other shall be issued to a person from which the control sample of fertiliser or substrate has been taken.

V. Actions to be Carried out with Final Samples

21. The Service shall handle the final samples as follows:

21.1. for the performance of analyses of undesirable impurities of fertilisers, organic and organo-mineral fertilisers, liming materials, atypical fertilisers, plant growth promoters and substrates, and also microbiological preparations:

21.1.1. one final sample shall be sent to an accredited laboratory for testing (analyses) within three days after sampling;

21.1.2. the second final sample shall be stored until receipt of testing (analyses) results;

21.1.3. the third final sample together with a sampling record shall be given to a person from which a control sample of fertiliser or substrate has been taken;

21.2. for the determination of the number of viable micro-organisms of microbiological preparations:

21.2.1. within three days after sampling one final sample shall be sent to a scientific institution which in conformity with the Law on Scientific Activity is registered with the Register of Scientific Institutions, or other officially registered scientific institution of other European Union Member State (hereinafter – the scientific institution), or to an accredited laboratory;

21.2.2. the second final sample shall be stored until receipt of testing (analyses) results;

21.2.3. the third final sample together with a sampling record shall be given to a person from which a control sample of microbiological preparation has been taken.

22. If testing results attest for the conformity of the quality of a fertiliser or substrate with identification requirements and permissible deviations from the declared quality, and the maximum permissible concentration of undesirable impurities is not exceeded in accordance with laws and regulations regarding identification and quality conformity assessment requirements of fertilisers and substrates, the Service shall write off the second final sample.

23. If during testing (analysing) non-conformity with the identification and quality conformity assessment requirements of the quality of the fertiliser or substrate is detected, the Service

shall send the second final sample to an accredited laboratory or – for the detection of viable micro-organisms of the microbiological preparation samples – to a scientific institution or accredited laboratory in order to perform a repeated testing.

VI. Closing Provision

24. The requirements of this Regulation shall be applied in respect of substrates from 1 July 2015.

Acting for the Prime Minister, the Minister for Transport

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Minimum Number of Initial Samples

No.	The size of the sample lot	The number of initial samples
1.	Unpacked (or in packaging which is larger than 100 kg) mineral fertilisers, liming materials, atypical fertilisers, and plant growth promoters	
1.1.	less than 2.5 tons	7
1.2.	from 2.5 to 80 tons	the next whole number which is larger than a square root of the lot mass in tons which is multiplied by 20
1.3.	more than 80 tons	40
2.	Packed mineral fertilisers, liming materials, atypical fertilisers, and plant growth promoters the packaging of which does not exceed 100 kg	
2.1.	packagings that are larger than 1 kg:	
2.1.1.	less than 5 packagings	of all packagings
2.1.2.	from 5 to 16 packagings	4
2.1.3.	from 17 to 400 packagings	the next whole number which is larger than a square root of the number of packagings
2.1.4.	more than 400 packagings	20
2.2.	1 kg or smaller packagings	4*
3.	Unpacked organic fertilisers and organo-mineral fertilisers and substrates	
3.1.	not more than 500 m ³	12
3.2.	more than 500 m ³	the next whole number which is larger than a square root of the lot amount in cubic metres which is divided by two
4.	Packed organic fertilisers and organo-mineral fertilisers and substrates	
4.1.	packagings that are larger than 5 litres:	
4.1.1.	less than 5 packagings	of all packagings
4.1.2.	from 5 to 16 packagings	4
4.1.3.	from 17 to 400 packagings	the next whole number which is larger than a square root of the number of lot packagings
4.1.4.	more than 400 packagings	20
4.2.	5 litres or smaller packagings	
4.2.1.	only for chemical analyses	4*
4.2.2.	for chemical and microbiological analyses	8*
5.	Microbiological preparations in a packaging	
5.1.	which is less than 0.2 kg	6*

5.2.	from 0.2 to 0.5 kg	4*
5.3.	from 0.51 to 1 kg	2*
5.4.	which is larger than 1 kg	1*

Note. * The number of original packagings.

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Minimum Mass of a Composite Sample

No.	Fertiliser	Mass/volume
1.	Unpacked (or in packaging which is larger than 100 kg) mineral fertilisers, liming materials, atypical fertilisers, and plant growth promoters	4 kg
2.	Packed mineral fertilisers, liming materials, atypical fertilisers, and plant growth promoters the packaging of which does not exceed 100 kg:	
2.1.	packagings that are larger than 1 kg	4 kg
2.2.	1 kg or smaller packagings	mass of 4 original packagings
3.	Unpacked organic fertilisers and organo-mineral fertilisers and substrates:	
3.1.	only for chemical and physical analyses	5 l
3.2.	for chemical, physical, and microbiological analyses	10 l
4.	Packed organic fertilisers and organo-mineral fertilisers and substrates:	
4.1.	packagings that are larger than 5 litres	
4.1.1.	only for chemical and physical analyses	5 l
4.1.2.	for chemical, physical and microbiological analyses	10 l
4.2.	5 litres or smaller packagings	
4.2.1.	only for chemical and physical analyses	mass of 4 original packagings
4.2.2.	for chemical, physical, and microbiological analyses	mass of 8 original packagings
5.	For the inspection of test of resistance to detonation of ammonium nitrate:	
5.1.	for detection of porosity (oil absorbing), burning ingredients, pH, granulometric composition, chlorine, copper	3 kg
5.2.	for test of resistance to detonation	75 kg
6.	Microbiological preparations in a packaging:	
6.1.	which is less than 0.2 kg	mass of 6 original packagings
6.2.	from 0.2 to 0.5 kg	mass of 4 original packagings
6.3.	from 0.51 to 1 kg	mass of 2 original packagings
6.4.	which is larger than 1 kg	2 kg

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Minimum Mass of a Final Sample

No.	Fertiliser	Mass/volume
1.	Mineral fertilisers	0.5 kg
2.	Liming materials	1 kg
3.	Organic and organo-mineral fertilisers and substrates for chemical and physical analyses	2 l
4.	Organic and organo-mineral fertilisers and substrates for chemical, physical, and microbiological analyses:	
4.1.	for chemical and physico-chemical analyses	2 l
4.2.	for microbiological analyses	2 l
5.	For detonation inspection of fertilisers containing ammonium nitrate (ammonium nitrate nitrogen – at least 28 %):	
5.1.	for detection of porosity (oil absorbing), burning ingredients, pH, granulometric composition, chlorine, copper	1 kg
5.2.	for test of resistance to detonation	25 kg
6.	Microbiological preparations (in 2 copies):	
6.1.	for detection of viable micro-organisms	0.2 kg
6.2.	for detection of undesirable impurities	0.2 kg
7.	Plant growth promoters for detection of biologically active compounds	0.5 kg

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Information to be Indicated in a Sampling Record of a Fertiliser and Substrate

1. The given name, surname, position of a sample taker and the institution represented by him or her.
2. The firm name and legal address of a merchant, or personal data and address of a natural person.
3. The date and time of sample taking, the address of the place of sample taking or the registration number of the vehicle where the sample is taken.
4. General information regarding a fertiliser or substrate – an official name and trade name (if any), the number of the registration certificate or permit of a fertiliser or substrate, or indication “EC FERTILISER”, the producer and importer of a fertiliser or substrate, as well as the packer thereof.
5. Declared quality indicators of a fertiliser or substrate.
6. A lot number and date of production or delivery of a fertiliser or substrate (if any available).
7. Total amount of a fertiliser or substrate in mass or volume units at the site of sampling (if the product is packed, the number of packagings shall be indicated).
8. The packaging type of a fertiliser or substrate and closing technique thereof.
9. Significant observations during sample taking including physical properties of a fertiliser or substrate, technical condition of the packaging, foreign objects (if any detected) or other similar observations.
10. The number of initial samples taken.
11. Mass of a composite sample.
12. Mass of a final sample.
13. Identification numbers which have been granted to the samples by the Service.
14. The description of the closing techniques of a final sample and stamps or seals.
15. Information regarding indicators to be tested.
16. Safety information (if any) regarding transportation and storage temperature of a sample or other similar observations.

17. Signature of a person taking the sample and the given name, surname, and signature of the person who has provided the information indicated in a sampling record.

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