

# Open Call for Tender

## for a Statistician

### to support the validation of the test methods for the analysis of fertilizers, liming materials and inhibitors

Starting date: 2023-09-22

Deadline for tenders: 2023-10-31

## I Introduction

### I.1 General

46 projects of CEN/TC 260 “Fertilizers and liming materials” require the development and validation of standardized test methods. A detailed overview of the projects is presented in Annex B. These methods will form the basis for the drafting of European Standards (EN).

For these 46 projects, inter-laboratory studies are required and a statistician will be contracted, which will cooperate in the validation and, if necessary, in the development of the required test methods.

### I.2 Context

With Standardization Request (SReq) M/564 of February 2020, its first amendment of January 2022 and the second amendment (in development), the European Commission (EC) charged the European Committee for Standardization (CEN) to elaborate harmonized European Standards and European standardization deliverables in the framework of the [Regulation \(EU\) 2019/1009 on fertilising products](#).

The new Regulation creates a level playing field for all fertilizing products. At the same time, new common requirements for quality, safety and labelling will allow European farmers to make informed choices, contributing to making food production more cost and resource effective. The harmonized standards will help economic operators and competent authorities to verify the compliance of CE-marked fertilizing products against the legal requirements.

The aim of the SReq is to develop methods on sampling and analysis of fertilizing products. The establishment of standardized methods of analysis is of utmost importance to guarantee a uniform application and control of the European legislation in all Member States. Standardized methods of analysis are an indispensable element in increasing the quality and safety for fertilizing products for the benefit of farmers. In this perspective, validated modern analytical methods are a prerequisite for reliable analytical results.

In accordance with Article 13(2) of Regulation (EU) 2019/1009, tests for verifying the conformity of EU fertilizing products with the requirements set out in Annexes I, II and III to that Regulation which are in conformity with harmonized standards or parts thereof, the references of which have been published in the Official Journal of the European Union, are to be presumed to be reliable and reproducible to the extent that the tests are covered by those standards or parts thereof.

Harmonized standards help ensuring a high level of protection of human, animal and plant health and of the environment throughout the European Union and contribute to the free movement of quality EU fertilizing products in the Union. Given that such standards are technology-neutral and performance-based, they also contribute to ensuring equal conditions of competition among relevant economic operators dealing with EU fertilizing products, in particular small and medium-sized enterprises. Harmonized standards help manufacturers in proving the conformity of their products with the relevant requirements set out in Union harmonization legislation.

## II Objectives

The objective of CEN/TC 260 “Fertilizers and liming materials” is the elaboration of harmonized standardized methods for sampling and analysis of fertilizers and liming materials. The secretariat is held by the German Institute for Standardization (DIN). Since 1995, about 100 European Standards, 8 Technical Specifications and 6 CEN-Reports were adopted by CEN/TC 260 in the frame of three EU Mandates as M/335, M/418 and M/455.

The elaboration of the elements requested in SReq M/564 and its amendments will be realized within CEN/TC 260 and its 5 Working Groups:

CEN/TC 260/WG 1 “Sampling” (Secretariat held by DIN, Germany);

CEN/TC 260/WG 3 “Liming materials” (Secretariat held by DIN, Germany);

CEN/TC 260/WG 5 “Chelating and complexing agents” (Secretariat held by UNE, Spain);

CEN/TC 260/WG 7 “Inorganic fertilizers and inhibitors” (Secretariat held by DIN, Germany);

CEN/TC 260/WG 8 “Organic and organo-mineral fertilizers” (Secretariat held by BN FERTI on behalf of AFNOR, France).

According to the Standardization Request M/564 and its amendments in support of Regulation (EU) 2019/1009, the resulting work programme for CEN/TC 260 comprises the drafting of about 78 European Standards of which 45 will be preceded by a CEN Technical Specification published in 2022.

These standardization deliverables will cover fertilizing products under the following Product Function Categories:

PFC 1 Fertilizers

PFC1/A Organic fertilizers

PFC 1/B Organo-mineral fertilizers

PFC 1/C Inorganic fertilizers

PFC 2 Liming materials

PFC 5 Inhibitors

PFC 7 Fertilizing product blends,

and the following Component Material Categories (CMCs):

CMC 1 Virgin material substances and mixtures

CMC 8 Nutrient Polymers.

Furthermore, other CMCs will be addressed in the standardization deliverables if relevant for the fertilizing products of CEN/TC 260.

The work is carefully coordinated together with CEN/TC 223 'Soil improvers and growing media' (internal liaison) and CEN/TC 455 'Plant biostimulants' (internal liaison). Where possible, work will be coordinated with ISO/TC 134 'Fertilizers, growing media and beneficial substances'.

The projects subject to this call (see Annex B) are allocated to CEN/TC 260/WG 3 “Liming materials, CEN/TC 260/WG 5 “Chelating and complexing agents”, CEN/TC 260/WG 7 “Inorganic fertilizers and inhibitors” and CEN/TC 260/WG 8 “Organic and organo-mineral fertilizers”.

### **III Execution**

#### **III.1 General tasks of the Statistician**

The Statistician will be responsible for the execution of the following tasks that are dependent on the complexity of the project (see project groups A, B and C, details in Annex B).

##### Tasks for project group A:

Standardization projects that require assistance in evaluation of the results of the respective inter-laboratory study including a report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

- in cooperation with the project leader, validation of the test methods based on the results of the laboratories taking part in the ring tests;
- in cooperation with project leader, statistical evaluation of the inter-laboratory studies on the test methods for the 13 projects including a report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
- necessary communication with the project leader to prepare the validation and discuss the results;

- data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
- verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009.

#### Tasks for Project Group B:

Standardization projects that require the planning of the respective inter-laboratory study, communication with the respective project leader and working and/or task group (e.g. by participation in meetings), evaluation of the results of the respective inter-laboratory study including an advanced report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

- in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), validation of the test methods based on the results of the laboratories taking part in the ring tests;
- assistance of the project leader (and/or the ring test organizer for projects of WG 8) in planning the inter-laboratory studies;
- in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), organization of the inter-laboratory studies of 22 projects by involving the participating laboratories (around 13 laboratories shall apply the new test method (validated data of at least 8 laboratories is required));
- in cooperation with project leader (and/or the ring test organizer for projects of WG 8), statistical evaluation of the inter-laboratory studies on the test methods for the 22 projects including an advanced report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
- attend preparatory meetings of the responsible Working Groups/Task Groups of CEN/TC 260 related to the inter-laboratory studies of the various test methods;
- discussion of the results of the statistical evaluation of the inter-laboratory studies within the responsible Working Group and/or Task Group of CEN/TC 260;
- data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
- verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009.

#### Tasks for Project Group C:

Standardization projects that require assistance in the development of the respective method including organization of pre-ring test, if necessary, planning the respective inter-laboratory study, communication with the respective project leader and working and/or task group (e.g. by participation in meetings), evaluation of the results of the respective inter-laboratory study including an advanced report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

- in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), validation of the test methods based on the results of the laboratories taking part in the ring tests;
- assistance the project leader (and/or the ring test organizer for projects of WG 8) in planning the inter-laboratory studies;
- assist the project leader (and/or the ring test organizer for projects of WG 8) in method development including organization of pre-ring test, if necessary;
- in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), organization of the inter-laboratory studies of 11 projects by involving the participating laboratories (around 13 laboratories shall apply the new test method (validated data of at least 8 laboratories is required));
- in cooperation with project leader (and/or the ring test organizer for projects of WG 8), statistical evaluation of the inter-laboratory studies on the test methods for the 11 projects including an advanced report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
- attend preparatory meetings of the responsible Working Groups/Task Groups of CEN/TC 260 related to the inter-laboratory studies of the various test methods;

- discussion of the results of the statistical evaluation of the inter-laboratory studies within the responsible Working Group and/or Task Group of CEN/TC 260;
- data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
- verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009;
- statistical support, especially for the validation of data on repeatability and reproducibility of the methods for all substances and for providing advice to the project leader in conducting any work which may require statistical advice.

### III.2 Timeframe

The service contract shall enter into force on the date on which it is signed by the last contracting party. The contracts with the selected technical project leader will be signed following the signature of the contract between CEN and EC/EFTA. The below target dates and timeframe are a realistic estimation but may still change as they have not yet been approved by the EC.

The European Standards corresponding to the projects subject to this call for tender shall be finalized by 1 July 2027 at the latest. Maximum target dates for the projects are as follows:

Step 1: Approval of work programme, protocol and draft test method by responsible Working Group	1 January 2024
Step 2: Circulation of 1st Working Draft (stage 20.60)	1 September 2024
Step 3: Start of validation (inter-laboratory study)	1 February 2025
Step 4: Interim report on the status of the project	1 July 2025
Step 5: Report on final results of validation	1 October 2025
Step 6: prEN Enquiry Draft (stage code 30.99)	1 January 2026
Step 7: FprEN Formal Vote Draft (stage code 45.99)	1 January 2027
Step 8: Final report	1 July 2027

This results in the following estimation of the latest possible target dates for validation and evaluation (individual per project):

Step Validation 1: Approval of procedure for statistical evaluation by the responsible Working Group/Task Group of CEN/TC 260	1 January 2024
Step Validation 2: Pre ring-test (if necessary for projects of group C)	1 June 2024
Step Validation 3: Inter-laboratory study	1 February 2025
Step Validation 4: Final report on statistical evaluation approved by the responsible Working Group/Task Group of CEN/TC 260	1 October 2025

It is to be noted that dependent on the progress of the project development in responsibility of the project leader, action of the Statistician is required before the above-mentioned dates. Especially, if documents pass through one or more stages earlier than indicated, the Statistician is obliged to start the work accordingly early. Specific projects are foreseen to reach the point for the necessary activities of the Statistician earlier. This will involve consultation with the project leader. For projects No 41, 42 and 43 in Annex B, target dates might be reached maximum 6 months later.

The Statistician shall respect the deadlines of the deliverables. If deadlines are not kept, EC is entitled to withhold payment.

## IV Financial support

The European Commission and EFTA have decided to provide financial support to the test method development, the test method validation and the standardization work. The financial support from the European Commission and EFTA is based on the SMP 'Single Market Programme Regulation' (including its Financing Decision) and the MGA (Multi or mono beneficiary(ies) Grant Agreement). Unless specified otherwise, costs of external subcontractors are generally funded at 100%, with approx. 95% being borne by EC and 5% by EFTA. Costs have to qualify as eligible as defined in MGA N°2021-04 and also in compliance with [EC Financial Regulation](#), and be justified. The payment is usually divided into several instalments after completion of defined milestones and approval of the interim/final reports and the justification of costs. The subcontractors shall fulfil the conditions of the MGA N°2021-04, including those relating to liability, ownership of results, confidentiality, conflict of interests, publicity, evaluation, assignment, checks and audits.

The subcontractors' costs shall be justified with copies of the relevant invoices. All relevant evidence shall be kept in view of future payments (reports, work, drafts and deliverables, contracts & invoices, time sheets, tickets, boarding cards, hotel invoices, attendance lists with signatures, meeting agendas & reports, invoices for any consumables, purchase orders, etc...).

**Costs incurred before the Grant Agreement is signed (unless, exceptionally differently agreed with the EC) and before the selection procedure is finalized, will not be considered as eligible for EU financial support.**

## V Selection criteria

The applicants shall comply with the following requirements:

1. Financial and economic capacity to execute the project
  - Sufficient economic and financial capacity to guarantee continuous and satisfactory performance throughout the envisaged lifetime of the contract.
  - Sufficient financial capacity to cover all pre-financing foreseen under the contract.
2. Technical and professional capacity
  - relevant experience in the planning and evaluation of inter-laboratory analytical studies, preferably with international character, and involving participants from different countries;
  - relevant experience in the evaluation of inter-laboratory studies in the field of analytical chemistry in accordance with internationally accepted standards, e.g. ISO 5725 and ISO 13528;
  - up-to-date knowledge of ISO/TC 69/SC 6 "Measurement methods and results";
  - experience in the support of method evaluation and the optimization of measurement methods and evaluation of measurement uncertainty;
  - experience with comparable projects in the development and validation of test methods;
  - sound educational qualifications, and further qualifications / significant experience in the area of statistical analysis and preferably a knowledge of analytical techniques of fertilizers / liming materials /inhibitors (of the relevant personnel involved);
  - communication skills and proficiency in English.

## VI Award criteria

The selection of the most suitable candidate will be made on the basis of the following criteria.

- a) Documented experience (maximum **40 points**):
  - number of years performing relevant activity;
  - ratio of (typical) annual activity and number of relevant activities;
  - experience with comparable projects on the development and validation of test methods;
  - experience in the organisation of inter-laboratory studies and the statistical assessment of the laboratory data;
  - experience in European and/or International standardization work including validation aspects;
  - adequate industrial and academic background;
  - general project management and communication skills including proficiency in English.
- b) Organisation (demonstration of the ability to carry out the project, maximum **30 points**):
  - ability to provide assistance to the project leader in planning of the inter-laboratory studies for the validation of test methods including statistical data analysis;
  - infrastructure (statistical assessment software, use of relevant International standards for statistical evaluation of inter-laboratory study results, etc.);
  - ability to submit agreed deliverables at or before specified dates;
  - ability to submit detailed cost estimations.
- c) Price (maximum **30 points**)

The candidate who will reach the highest score according to the below formula will be considered as the best value for money offer and hence should be the candidate selected to perform the expected activities (unless force majeure).

Score for tender X = (points awarded for documented experience)+(points for organisation) +  $30 \left( \frac{\text{cheapest price}}{\text{price of tender X}} \right)$

Scores from 0 to x are possible. Tenders scoring less than 65 % of the overall total points or less than 50 % of the points awarded for a single criterion (criterion a) and b), respectively) will be excluded from the remaining assessment procedure.

## **VII Eligibility criteria**

The following candidates will be excluded:

- Candidates who were the subject of a non-likely judgment of recourse for a professional infringement
- Candidates who are in an irregular tax situation or in an irregular special taxation situation
- Candidates who provide incomplete or erroneous information.
- Candidates who submit their application after the submission deadline.
- Candidates with any conflict of interest.

## **VIII Tenders**

Tenders shall be sent to Dr. Sophie Dithmer, secretary of CEN/TC 260, as soon as possible, to be received at the latest by 2023-10-31. Tenderers must place a bid inside a sealed envelope clearly marked CONFIDENTIAL, placing the sealed envelope in a second envelope which is posted to the address indicated.

The tender shall be in English and contain:

- Application form in Annex C;
- Curriculum Vitae of each relevant person participating in the project, demonstrating the necessary expertise for the position as project leader;
- Any required accreditation certificates;
- A schedule and a description of the execution of the tasks which will be carried out in the project as such;
- A table in the format given in Annex A with detailed information on the costs;
- Appropriate documentation to prove the economic and financial capacities;
- Any further documents to prove the qualification required in the above Clauses on Selection and Award criteria;
- A signed declaration (see Annex C), by which the candidate(s) certifies not to be subject to one of the exclusion criteria as described in Clause "Eligibility criteria" and the veracity of the adjoining documents.

Please note that, to ensure equal treatment of all tenders, it is not possible to modify offers after their submission in relation to the technical and financial proposals. Therefore, incompleteness in this section can only result in negative impact for the evaluation of award criteria. Please note also that proposals deviating from the technical specifications may be rejected for non-conformity.

Candidates may apply for more than one role. In case of multiple applications candidates shall state their priorities.

Tenders should be sent by legal representative, i.e. to be considered, any possible association has to be formalized according to the local legislation before submitting the tender. Working teams, partnerships and other groups of people, particularly under the aegis of an institute qualify as contractors for the service contracts awarded in the course of this CfT (Call for Tender). Partnerships or joint ventures and other legally binding co-operations regardless of their organizational form qualify as well, provided they are recognized entities under the applicable national laws. Potential candidates may come from the public sector as well as from the private industry. It is essential however that the qualifications and experience of the individual fulfilling the tasks are properly described.

It is possible to apply for a work package as a consortium. If a consortium is formed, one institute needs to be identified as the leader of the consortium and the division of labour between the consortium members should be clearly described and justified. In this case, only the leader of the consortium would sign the contract with the contractor and ensure that all tasks are fulfilled and is responsible for the justifications and expenses of the consortium members. It is essential however that all members of the consortium are properly identified within the offer.

Regarding question concerning the information provided in this call for tender or in case of need for clarification or additional information please contact Dr. Sophie Dithmer (for contact details please see below).

If due to queries or other reasons supplementary information to this call for tender is required, this will be published on the website of DIN: <https://www.din.de/de/mitwirken/ausschreibungen>.

Your application shall be sent in a sealed envelope clearly marked CONFIDENTIAL, placing the sealed envelope in a second envelope to

DIN Deutsches Institut für Normung e. V.  
Frau Dr. Sophie Dithmer  
Burggrafenstraße 6  
10787 Berlin  
Germany

For questions, please use the following email address:

E-Mail: [Sophie.Dithmer@din.de](mailto:Sophie.Dithmer@din.de)

## Annex A

### Table with detailed information on the costs

The following table shall be used in the tender to give detailed information on the costs regarding the work of 'Advertised position'.

Organisation / Staff level	Daily rate	Number of person-days	<b>Total</b>	Travel budget	<b>Total cost</b>
	0,00	0	<b>0,00</b>	0,00	<b>0,00</b>
	0,00	0	<b>0,00</b>	0,00	<b>0,00</b>
	0,00	0	<b>0,00</b>	0,00	<b>0,00</b>



## Annex B

### List of projects

<b>Project Group A</b>	
<b>1.</b>	<b><i>Inorganic fertilizers – Determination of total nitrogen in methylene urea and urea formaldehyde (revision of EN 15478:2009)</i></b>
	Scope: This document specifies a method for the determination of the content of total nitrogen from methylene-urea and urea formaldehyde in their pure form in inorganic fertilizers.
	Responsible working group: CEN/TC 260/WG 7
<b>2.</b>	<b><i>Inorganic fertilizers – Determination of the total K<sub>2</sub>O content</i></b>
	Scope: This document specifies two different methods (Method A and B) for the determination of the content of potassium (expressed as K <sub>2</sub> O) in inorganic fertilizers. Method A specifies a gravimetric method. Method B specifies the method using inductively coupled plasma optical emission spectrometry (ICP-OES).
	Note: Project should include 2 methods (gravimetric and ICP-OES method), i.e., 1 project and 1 combined ILS, which means the same samples should be extracted and K <sub>2</sub> O should be determined with both methods on same extract.
	Responsible working group: CEN/TC 260/WG 7
<b>3.</b>	<b><i>Inorganic fertilizers - Determination of the combustible ingredient content in ammonium nitrate fertilizers of high nitrogen content</i></b>
	Scope: This document specifies a method for the determination of the combustible ingredient content in ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>4.</b>	<b><i>Inorganic fertilizers - Determination of pH of a solution of ammonium nitrate fertilizer of high nitrogen content (revision of CEN/TS 17759:2022)</i></b>
	Scope: This document specifies a method for the determination of pH of a solution of ammonium nitrate fertilizer of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>5.</b>	<b><i>Inorganic fertilizers - Determination of particle size of ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17760:2022)</i></b>
	Scope: This document specifies a method for the determination of particle size of ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>6.</b>	<b><i>Inorganic fertilizers - Determination of the chloride content in ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17761:2022)</i></b>
	Scope: This document specifies a method for the determination of the chloride content in ammonium nitrate fertilizers of high nitrogen content.

	Responsible working group: CEN/TC 260/WG 7
<b>7.</b>	<b><i>Inorganic fertilizers - Determination of the copper content in ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17762:2022)</i></b>
	Scope: This document specifies a method for the determination of the copper content in ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>8.</b>	<b><i>Inorganic fertilizers - Determination of the organic carbon content</i></b>
	Scope: This document specifies a method for the organic carbon content of inorganic fertilizers.
	Responsible working group: CEN/TC 260/WG 7
<b>9.</b>	<b><i>Fertilizers - Determination of cold water insoluble nitrogen and hot water insoluble nitrogen in solid urea formaldehyde and methylene urea slow-release fertilizers and determination of the solubility of nutrient polymers in phosphate buffer solution with a pH of 7,5 at 100 °C (revision of CEN/TS 17403:2021)</i></b>
	Scope: This document specifies a method for the determination of the cold and hot water insoluble nitrogen content in solid urea formaldehyde and methylene urea slow release fertilizers and for the determination of the solubility of nutrient polymers in a phosphate buffer solution with a pH of 7,5 at 100 °C.
	Responsible working group: CEN/TC 260/WG 7
<b>10.</b>	<b><i>Determination of the final degradation products of nutrient polymers when used in fertilizing products</i></b>
	Scope: This document specifies a method for the determination of the final degradation products (ammonia and carbon dioxide) of nutrient polymers when used in fertilizing products.
	Responsible working group: CEN/TC 260/WG 7
<b>11.</b>	<b><i>Determination of the free formaldehyde content in nutrient polymers when used in fertilizing products</i></b>
	Scope: This document specifies methods for the determination of the free formaldehyde content in solid nutrient polymers (method A) and in liquid nutrient polymers (method B).
	Responsible working group: CEN/TC 260/WG 7
<b>12.</b>	<b><i>Fertilizers and liming materials – Determination of the chloride content by potentiometric titration (revision of CEN/TS 17758:2022)</i></b>
	Scope: This document specifies a method for the determination of the chloride content in organic fertilizers, organo-mineral fertilizers, inorganic fertilizers and liming materials by potentiometric titration.
	Responsible working group: CEN/TC 260/WG 7
<b>13.</b>	<b><i>Inorganic fertilizers and liming materials - Determination of cadmium, chromium, lead, nickel, copper and zinc by inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution (revision of EN 16319:2013+A1:2014)</i></b>

	<p>Scope:</p> <p>This document specifies method for the determination of the content of cadmium, chromium, nickel, lead, copper and zinc in inorganic fertilizers and liming materials using inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution. Limits of quantification are dependent on the sample matrix as well as on the instrument, but can roughly be expected to be 0,3mg/kg for Cd and 1mg/kg for Cr, Ni and Pb.</p>
	<p>Note: The method is already validated for cadmium, chromium, lead and nickel. The validation of the revision will only include copper and zinc.</p>
	<p>Responsible working group: CEN/TC 260/WG 3</p>
<p><b>Project Group B</b></p>	
<b>14.</b>	<p><b><i>Fertilizing products - Determination of the stability of fertilizing products containing micronutrient chelates at different pHs (revision of CEN/TS 17782:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the soluble metal that remains in solution at different pHs after the application of a solution of the fertilizer substance containing micronutrient chelates in a tap water solution used as a reference. The method applies to fertilizing products containing chelated micronutrients.</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
<b>15.</b>	<p><b><i>Fertilizing products - Determination of the stability of fertilizing products containing micronutrient complexes (revision of CEN/TS 17783:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the soluble metal that remains in solution after the application of a solution of the fertilizer substance containing micronutrient complexes in water and adjusting the pH to 6 and pH 7 for at least one day. The method applies to fertilizing products containing micronutrient complexes.</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
<b>16.</b>	<p><b><i>Inorganic micronutrient fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients - Part 1: Treatment with a cation exchange resin (revision of CEN/TS 17786-1:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the chelated iron content and the chelated fraction of iron, in UVCB chelats, EDDHA, EDDHMA, HBED, EDDHSA, in inorganic micronutrient fertilizers by the treatment with a cation exchange resin.</p> <p>The limit of determination of the chelated iron content highly depends on the specific electrical conductivity of the sample, on the amount of nutrient present, and varies between 0,005 % in simple matrices with high amounts of micronutrient and 0,5 % in more complex cases (see 9.1).</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
<b>17.</b>	<p><b><i>Inorganic micronutrient fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients - Part 2: Determination of EDTA, DTPA, HEEDTA, IDHA or EDDS (revision of CEN/TS 17786-2:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the chelated fraction of micronutrients for fertilizers containing one or many micronutrients chelated by EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS in fertilizers.</p>

	<p>This method is used for inorganic micronutrient fertilizers when micronutrients are chelated only by EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS or for mixtures in which EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS is one of the chelating agents.</p> <p>The method is applicable to all inorganic micronutrient fertilizers containing EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS as chelating agent for contents &gt; 0,1 % (w/w).</p> <p>The method is based on ICP or AAS measurement of the concentration of micronutrients according to EN 16963 or EN 16965 after water extraction according to EN 16962 and LC measurement of the chelating agents according to EN 15950, EN 13368-1 and EN 13368-3.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>18.</b>	<b><i>Inorganic micronutrient fertilizers - Determination of the concentration of free, chelated or complexed micronutrients and the chelating and/or complexing agents present in compound inorganic micronutrient fertilizers (revision of CEN/TS 17764:2022)</i></b>
	<p>Scope:</p> <p>This document specifies the method for the determination of free, chelated or complexed micronutrients and chelating and/or complexing agents present in compound inorganic micronutrient fertilizers. This method applies to compound inorganic micronutrient fertilizers when micronutrients are chelated and/or complexed. The method is based on the determination of the following specific parameters : - the water-soluble micronutrient concentration; - the fraction of chelated micronutrients in relation; - identification of chelating agents EDTA, DTPA, HEEDTA, IDHA, [S,S]-EDDS, [o,o] EDDHA, [o,o] EDDHMA, [o,p] EDDHA, HBED and EDDHSA; - the fraction of complexed micronutrients; - identification of complexing agents (lignosulfonates, heptagluconic acid (HGA)). The method is based on - ICP (inductive coupled plasma) or FAAS (flame atomic absorption spectrometry) measurement of the concentration of water-soluble micronutrients according to EN 16963 or EN 16965 after extraction according to EN 16962; - LC (liquid chromatography) measurement of the chelating agents according to EN 15950, EN 13368-1, EN 13368-2, EN 13368-3, EN 15451, EN 15452; and/or complexing agents according to EN 16109 and EN 16847; - determination of the concentration of chelated micronutrients by CEN/TS 17786-1 and/or CEN/TS 17786-2; - determination of the complexed micronutrients by EN 15962. To avoid duplication of the analytical methods, CEN/TS 17786-2 describes the determination of micronutrients and the identification and determination of chelating agents.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>19.</b>	<b><i>Fertilizing products – Demonstration of efficacy of nitrification inhibitors</i></b>
	<p>Scope:</p> <p>This document specifies a method for the demonstration of the efficacy of nitrification inhibitors in fertilizing products.</p>
	Responsible working group: CEN/TC 260/WG 7
<b>20.</b>	<b><i>Fertilizing products – Demonstration of efficacy of urease inhibitors</i></b>
	<p>Scope:</p> <p>This document specifies a method for the demonstration of the efficacy of urease inhibitors in fertilizing products.</p>
	Responsible working group: CEN/TC 260/WG 7
<b>21.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the total content of specific elements by ICP-AES after digestion by aqua regia (revision of CEN/TS 17770:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination of elements in organic fertilizers and organo-mineral fertilizers digests using inductively coupled plasma-atomic emission spectrometry (ICP-AES). NOTE Alternatively, inductively coupled plasma mass spectrometry</p>

	(ICP-MS) can be used for the measurement if the user proves that the method gives the same results. This method is applicable to aqua regia digests prepared according to CEN/TS 17768 for the determination of P, K, Ca, Mg, Na, S, B, Co, Cu, Fe, Mn, Mo, Zn, As, Cd, Cr, Ni, Pb by ICP-AES. The method can be used for the determination of other elements, provided the user has verified the applicability.
	Responsible working group: CEN/TC 260/WG 8
<b>22.</b>	<b><i>Organic and organo-mineral fertilizers - Digestion by aqua regia for subsequent determination of elements (revision of CEN/TS 17768:2022)</i></b>
	Scope:  This document specifies the procedure for the digestion of different organic fertilizers and organo-mineral fertilizers with aqua regia to enable a subsequent determination of elements. The extracts are suitable for analysis using CEN/TS 17770 and CEN/TS 17769.  NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results.
	Responsible working group: CEN/TC 260/WG 8
<b>23.</b>	<b><i>Organic and organo-mineral fertilizers – Determination of the content of specific elements by ICP-AES after extraction by water (revision of CEN/TS 17774:2022)</i></b>
	Scope:  This document specifies a method for the determination of boron (B), cobalt (Co), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn) in organic fertilizers and organo-mineral fertilizers extracts using inductively coupled plasma-atomic emission spectrometry (ICP-AES). NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results. This method is applicable to water extracts prepared according to CEN/TS 17766. The method can be used for the determination of other elements, provided the user has verified the applicability.
	Responsible working group: CEN/TC 260/WG 8
<b>24.</b>	<b><i>Organic and organo-mineral fertilizers - Extraction by water for subsequent determination of elements (revision of CEN/TS 17766:2022)</i></b>
	Scope:  This document specifies a method for the extraction by water for the subsequent determination of elements. The extracts are suitable for analysis using CEN/TS 17774. NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results. The method is applicable to organic and organo-mineral fertilizers.
	Responsible working group: CEN/TC 260/WG 8
<b>25.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the dry matter content (revision of CEN/TS 17773:2022)</i></b>
	Scope:  This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends. This document specifies the procedure for the determination and calculation of the dry matter fraction of organic and organo-mineral fertilizers for which the results of the performed analysis are calculated to the dry matter basis.
	Responsible working group: CEN/TC 260/WG 8

26.	<b>Organic and organo-mineral fertilizers - Determination of the chromium VI content (revision of CEN/TS 17778:2022)</b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [3]. However, the present method was not validated on blends. This document specifies a method for the determination of hexavalent chromium (chromium (VI)) in organic and organo-mineral fertilizers. The method described is suitable to quantify the chromium (VI) content in organic and organo-mineral fertilizers down to 2 mg/kg dry matter. The results obtained from this method are strictly dependent on the extraction conditions. Results obtained by using other extraction procedures (extraction solution, pH of the extraction solution, extraction time, extraction temperature, etc.) are not comparable with the results produced by the procedure described in this document.</p>
	Responsible working group: CEN/TC 260/WG 8
27.	<b>Organic and organo-mineral fertilizers Determination of mercury content (revision of CEN/TS 17769:2022)</b>
	<p>Scope:</p> <p>This document specifies a method for determination of the content of mercury (Hg) in organic fertilizers and organo-mineral fertilizers using (cold) vapour generation apparatus coupled to an atomic absorption spectrophotometer and a method using a direct amalgamation technique. It is applicable to aqua regia digests prepared according to CEN/TS 17768. NOTE It is also possible to use other suitable methods for the determination of mercury described in Annex A if users prove that the method gives the same results as the methods described in this standard.</p>
	Responsible working group: CEN/TC 260/WG 8
28.	<b>Organo-mineral fertilizers - Identification of complexing agents - Part 1: Method using UV-Vis spectrophotometry and gravimetry (revision of CEN/TS 17784-1:2022)</b>
	<p>Scope:</p> <p>This document specifies two methods required for the identification of lignosulfonate by UV-Vis spectrophotometry (method A) and gravimetry (method B) in organo-mineral fertilizers.</p> <p>NOTE Lignosulfonate, as a complexing agent, is a natural polymer produced as a by-product of the sulfite method for manufacturing paper from wood pulp in the paper industry. As a natural polymer, it presents a poorly defined and variable chemical structure. It is an intricate mixture of small- to moderate-sized polymeric compounds with sulfonate groups attached to the molecule, and diverse complexing capacity.</p>
	Responsible working group: CEN/TC 260/WG 5
29.	<b>Organo-mineral fertilizers - Identification of complexing agents - Part 2: Method using high-performance liquid chromatography (HPLC) (revision of CEN/TS 17784-2:2022)</b>
	<p>Scope:</p> <p>This document specifies a chromatographic method which allows the identification of heptagluconic acid (HGA) in organo-mineral fertilizers containing heptagluconic acid metal complexes.</p>
	Responsible working group: CEN/TC 260/WG 5
30.	<b>Organo-mineral fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients by treatment with a cation exchange resin (revision of CEN/TS 17790:2022)</b>
	Scope:

	<p>This document specifies a method for the determination of the chelated micronutrient content and the chelated fraction of a micronutrient, in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, etc), algae extract, and animal meal (feather, bones, blood, etc) and containing UVCB, EDDHA, EDDHMA, HBED, EDDHSA micronutrients by the treatment with a cation exchange resin. The limit of determination of the chelated micronutrient content highly depends on the specific electrical conductivity of the sample, on the amount of nutrient present, and varies between 0,005 % in simple matrices with high amounts of micronutrient, and 0,5 % in more complex cases (see 9.1).</p>
	Responsible working group: CEN/TC 260/WG 5
<b>31.</b>	<b><i>Organo-mineral fertilizers - Identification of chelating agents - Part 1: Determination of EDTA, HEEDTA and DTPA by ion chromatography (revision of CEN/TS 17789-1:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination by ion chromatography of the total amount of each of the individual chelating agents EDTA, HEEDTA, and DTPA in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, ...), algae extract, and animal meal (feather, bones, blood, ...) and containing one or more of these substances.</p> <p>The method allows the identification and the determination of the total water-soluble fraction of each of these chelating agents. It does not allow to distinguish between the free form and the metal bound form of the chelating agents.</p> <p>This method applies to organo-mineral fertilizers containing chelates of one or more of the following micronutrients: cobalt, copper, iron, manganese, zinc and with a mass fraction of at least 0,1 %.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>32.</b>	<b><i>Organo-mineral fertilizers - Identification of chelating agents - Part 2: Determination of Fe chelated by [o,o] EDDHA, [o,o] EDDHMA and HBED, or the amount of chelating agents by ion pair chromatography (revision of CEN/TS 17789-2:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination by ion pair chromatography of the iron chelated by each individual ortho(hydroxy)-ortho(hydroxy) isomer of the chelating agents [o,o] EDDHA, [o,o] EDDHMA and by HBED in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, ...), algae extract, and animal meal (feather, bones, blood, ...) and containing one or more of these substances, except for [o,o] EDDHMA and HBED mixes.</p> <p>The method allows the identification and the determination of the total concentration of water soluble iron chelates of these chelating agents. Also, after derivatization with Fe, the soluble amount of the chelating agents can be determined when other micronutrients beside Fe are present in organo-mineral fertilizers containing [o,o] EDDHA, [o,o] EDDHMA or HBED.</p> <p>This method is applicable to a mass fraction of the metal chelated of at least 0,625 %.</p> <p>NOTE 1 The substances EDDHA and EDDHMA exist as several different isomeric forms. Positional isomers for the hydroxyl or methyl groups (in ortho, meta, and para positions) as well as stereo isomers (meso and dl-racemic forms) are known. Both meso and dl-racemic forms of the [ortho,ortho] EDDHA and [ortho,ortho]. Since para, meta and ortho methyl positional isomers of the EDDHMA present quite similar stability, they could be grouped: in the method here described the para, meta and ortho methyl positional isomers of the [o,o] EDDHMA are considered together. HBED (N,N'-bis(2-hydroxybenzyl)-ethylenediamine-N,N'-diacetic acid) does not present isomeric forms.</p> <p>NOTE 2 At present, analytically pure standards only exist for [ortho,ortho] EDDHA, [ortho,ortho] EDDHMA and HBED. All other substances being unavailable as a standard, the</p>

	<p>influence of their eventual presence in the samples (with respect to the sensitivity and the selectivity of this method) has not been studied.</p> <p>NOTE 3 The meso and the dl-racemic forms of [o,o] EDDHA and [o,o] EDDHMA can be determined separately by this method.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>33.</b>	<b><i>Organo-mineral fertilizers - Determination of the fraction of complexed micronutrients (revision of CEN/TS 17788:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a general method for the determination of the micronutrients complexed by complexing agents in organo-mineral fertilizers. The method allows the determination of the total concentration of each complexed micronutrient in complexes after subtraction of the chelated micro-nutrients content, but it does not identify the individual complexing agents. This procedure concerns EU organo-mineral fertilizing products which contain complexed micro-nutrients covered by Regulation (EU) 2019/1009 [6]. The method is applicable to a mass fraction of the metal complexed of at least 0,07 %, 0,006 % and 0,035 % of Fe, Mn and Zn respectively (see [7]). A lower limit of quantification has not been established for Cu and Co.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>34.</b>	<b><i>Organo-mineral fertilizers – Extraction of phosphorus by formic acid (revision of CEN/TS 17767:2022)</i></b>
	<p>Scope:</p> <p>This document specifies the procedure for the extraction of phosphorus in 2 % formic acid (20 g/l), representing the amount of soft natural phosphates. The method is applicable to organo-mineral fertilizers.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>35.</b>	<b><i>Organo-mineral fertilizers - Extraction of phosphorus, which is soluble in neutral ammonium citrate (revision of CEN/TS 17779:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the extraction of phosphorus soluble in neutral ammonium citrate. The method is applicable to organo-mineral fertilizers.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>Project Group C</b>	
<b>36.</b>	<b><i>Fertilizers and liming materials - Determination of the phosphonates content in organic, organo-mineral and inorganic fertilizers, liming materials and inhibitors</i></b>
	<p>Scope:</p> <p>This document specifies methods for the determination of the phosphonates content in organic, organo-mineral and inorganic fertilizers, liming materials and inhibitors.</p>
	Responsible working group: CEN/TC 260/WG 3
<b>37.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the total organic carbon (TOC) content by dry combustion (revision of CEN/TS 17776:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [5]. However, the present method was not validated for blends. This document specifies a method for the determination of total organic carbon (TOC) by elemental analysis using dry combustion.</p>



	The method is applicable to organic and organo-mineral fertilizers containing more than 1 g carbon per kg of dry matter (0,1 %), with the exclusion of organo-mineral fertilizers containing urea-formaldehyde polymers as long as there is no method available to assess carbon in urea-formaldehyde polymers.
	Responsible working group: CEN/TC 260/WG 8
<b>38.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the biuret content by high-performance liquid chromatography (HPLC) (revision of CEN/TS 17765:2022)</i></b>
	Scope:  This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [4]. However, the present method was not validated for blends. This document specifies a method for the determination of the biuret content by high-performance liquid chromatography (HPLC) with UV detector. The method is applicable to organic and organo-mineral fertilizers containing urea. Nowadays, there is a method standardized as EN 15479 that allows the determination of biuret in urea by spectrophotometric detection. Organic and organo-mineral fertilizers contain organic matter and other compounds apart from urea that would interfere in a spectrophotometric method. HPLC allows an accurate determination of biuret by separating it from possible interfering compounds [2] [3].
	Responsible working group: CEN/TC 260/WG 8
<b>39.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the inorganic arsenic content (revision of CEN/TS 17775:2022)</i></b>
	Scope:  This document specifies a method for extraction, separation, and determination of inorganic arsenic (iAs) in organic or organo-mineral fertilizers using anion-exchange HPLC or IC coupled to ICP-MS.
	Responsible working group: CEN/TC 260/WG 8
<b>40.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the nitrogen content (revision of CEN/TS 17771:2022)</i></b>
	Scope:  This document is applicable to fertilizing products, which are classified as PFC 1(A) or PFC 1(B) of Regulation (EU) 2019/1009 [5]. However, the present method was not validated for blends. This document specifies a method for the determination of the total nitrogen content and the content of ammoniacal, nitric, ureic and organic nitrogen in organic and organo-mineral fertilizers. This method is based on EN 15604:2009 and adapted to be applicable to organic and organo-mineral fertilizers.
	Responsible working group: CEN/TC 260/WG 8
<b>41.</b>	<b><i>Organic, organo-mineral and inorganic fertilizers - Detection of Salmonella spp (revision of CEN/TS 17780:2022)</i></b>
	Scope:  This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends. This document specifies a method for the detection of Salmonella spp. in organic, organo-mineral and inorganic fertilizers. The method is based on EN ISO 6579-1 and its validated alternative methods for the detection of Salmonella spp. in food and feeding stuff. It requires three successive steps: A selective enrichment, an isolation on a chromogenic agar, and if positive a confirmation with a serological test (and if required, a selective media).
	Responsible working group: CEN/TC 260/WG 8

42.	<b>Organic, organo-mineral and inorganic fertilizers - Detection of <i>Escherichia coli</i> (revision of CEN/TS 17781:2022)</b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends.</p> <p>This document specifies a colony-count technique at 44 °C on a solid medium containing a chromogenic ingredient for the detection of the enzyme <math>\beta</math>-glucuronidase. The method is based on ISO 16649-2 [4].</p> <p>Strains of <i>Escherichia coli</i> which do not grow at 44 °C and, in particular, those that are <math>\beta</math>-glucuronidase negative, such as <i>Escherichia coli</i> O157, will not be detected. Detected microorganisms are presumptively determined <math>\beta</math>-glucuronidase-positive <i>Escherichia coli</i>, since some Enterobacteriaceae, in particular <i>Shigella</i> and <i>Salmonella</i>, can also show <math>\beta</math>-glucuronidase activity at 44 °C.</p>
	Responsible working group: CEN/TC 260/WG 8
43.	<b>Organic, organo-mineral and inorganic fertilizers - Detection of <i>Enterococaceae</i> (revision of CEN/TS 17804:2022)</b>
	<p>Scope :</p> <p>This document specifies a method for the detection and enumeration of <i>Enterococaceae</i> in fertilizers of the following Product Function Categories (PFCs) of EU fertilizing products, as described in Regulation (EU) 2019/1009 [1]:</p> <p>PFC 1(A): Organic fertilizer;</p> <p>PFC 1(B): Organo-mineral fertilizer;</p> <p>PFC 1(C): Inorganic fertilizer, which contains more than 1 % by mass of organic carbon, other than organic carbon from chelating or complexing agents, nitrification inhibitors, denitrification inhibitors or urease inhibitors, coating agents, urea or calcium cyanamide. The present method was validated on products known as present on the market in April 2021 and conform to Regulation (EU) 2019/1009 [1] that are inorganic fertilizers with more than 1 % of organic carbon such as poultry manure and struvite with low level of organic matter. In case that other products would be developed having other physical and chemical characteristics, it might become necessary to develop different methods to correctly account for pathogens they might contain.</p> <p>This document specifies a colony-count technique on selective media, Slanetz Bartley agar or Bile Esculin Azide agar, respectively. The method is based on EN ISO 7899-2:2000.</p>
	Responsible working group: CEN/TC 260/WG 8
44.	<b>Organo-mineral fertilizers - Determination of the urease inhibitor content</b>
	Scope: This document specifies a method for the determination of the urease inhibitor N-(n-butyl)thiophosphoric triamide (NBPT) in organo-mineral fertilizers.
	Note: A European Standard can be developed under the condition that urease inhibitors (NBPT) and its metabolites are determined. It is not possible to show any urease inhibitor in a complex fertilizer such as organo-mineral fertilizer. Currently, an interlaboratory-study can include spiked samples because products are not on the market but are expected to be on the market in the coming years.
	Responsible working group: CEN/TC 260/WG 7
45.	<b>Inorganic fertilizers – Determination of monocarbamide dihydrogen sulphate (MCDHS)</b>
	Scope: This document specifies a method for the determination of monocarbamide dihydrogen sulphate (MCDHS) in inorganic fertilizers.

	Responsible working group: CEN/TC 260/WG 7
<b>46.</b>	<b><i>Inhibitors — Determination of the chloride content by ion chromatography</i></b>
	Scope: This document specifies a method for the determination of the chloride content in inhibitors by ion chromatography.
	Responsible working group: CEN/TC 260/WG 7

## Annex C

Application to a Call for Tender process in compliance with SMP Single Market Programme Regulation (and its financing decision) & MGA (Mono or Multi beneficiary(ies) Grant Agreement)

**A- Contact details of the Expert**

<b>Name:</b> <b>Position:</b> <b>Phone:</b> <b>Email address:</b> <b>Personal website (if any)</b>
--

**B- Information about the organisation/s the expert is working (name, website, contact person, phone, email)**

--

**C- Curriculum Vitae (maximum 4 A4 pages)**

**D- Please specify for which position you are applying:**  
*(should correspond to one of the call positions)*

.....

**E- Please describe and show evidence of the required skills and expertise for the role you are applying for** (half a page maximum including your proposed approach)

Yes	No	Skills and expertise	Short description of the evidence of the required skills and expertise for the role you are applying for
1. Financial and economic capacity to execute the project			
		Sufficient economic and financial capacity to guarantee continuous and satisfactory performance throughout the envisaged lifetime of the contract	

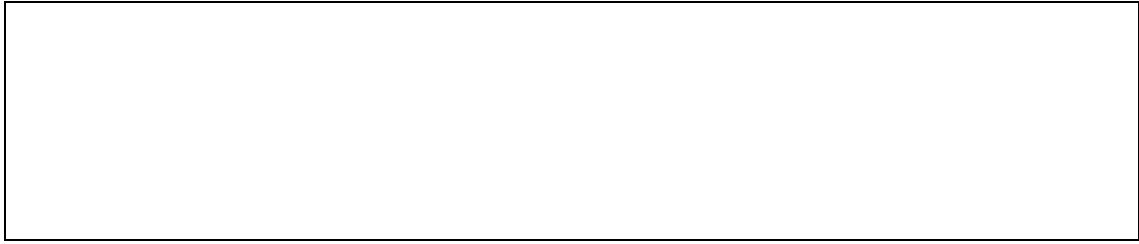
		Sufficient financial capacity to cover all pre-financing foreseen under the contract.	
<b>2. Technical and professional capacity</b>			
		relevant experience in the planning and evaluation of inter-laboratory analytical studies, preferably with international character, and involving participants from different countries	
		relevant experience in the evaluation of inter-laboratory studies in the field of analytical chemistry in accordance with internationally accepted standards, e.g. ISO 5725 and ISO 13528	
		up-to-date knowledge of ISO/TC 69/SC 6 "Measurement methods and results"	
		experience in the support of method evaluation and the optimization of measurement methods and evaluation of measurement uncertainty	
		experience with comparable projects in the development and validation of test methods	
		sound educational qualifications, and further qualifications / significant experience in the area of statistical analysis and preferably a knowledge of analytical techniques of fertilizers / liming materials /inhibitors (of the relevant personnel involved)	
		communication skills and proficiency in English	

**F- Information on the costs of the experts**

- Daily rates:
  - Number of person-days:
  - Cost for travels:
  - Other costs:
- 

**Total costs:**

**G- Description of the offer (answer to the call for tender)**



I certify that all documents provided are veracious and in conformity with reality and certify not to be in any situation described below:

- a) subject of a non-likely judgment of recourse for a professional infringement
- b) to be in an irregular tax situation or in an irregular special taxation situation
- c) to provide with incomplete or erroneous information

I also certify that I had no conflict of interest by submitting the present offer.

Signed:

On behalf of :(print name here)

Date:

**Annex D**  
**Draft Service Contract**

## Draft Service contract

Between

DIN Deutsches Institut für Normung e. V.  
Am DIN-Platz  
Burggrafenstraße 6  
10787 Berlin  
hereinafter referred to as "DIN"

and

<<Subcontractor>>

<<Address>>

.....

hereinafter referred to as the "CONTRACTOR"

### Introduction

The European Commission/EFTA has decided to fund SA/CEN/2021-04 "Fertilizers and liming materials". The projects are dealt with by CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN. DIN assures the organizational coordination work on behalf of CEN/TC 260.

### 1. Object of the Service contract

The CONTRACTOR agrees that it will participate as a Statistician for a cumulative amount of <<xx person-days starting from 20xx-xx-xx and finishing by 20xx-xx-xx within CEN/TC 260 >> which is tasked to support the development of the deliverables in Annex 2.

### 2. Duties of the CONTRACTOR

The CONTRACTOR's duties will include:

#### Tasks for project group A:

Standardization projects that require assistance in evaluation of the results of the respective inter-laboratory study including a report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

1. in cooperation with the project leader, validation of the test methods based on the results of the laboratories taking part in the ring tests;
2. in cooperation with project leader, statistical evaluation of the inter-laboratory studies on the test methods for the 13 projects including a report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
3. necessary communication with the project leader to prepare the validation and discuss the results;



4. data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
5. verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009.

#### Tasks for Project Group B:

Standardization projects that require the planning of the respective inter-laboratory study, communication with the respective project leader and working and/or task group (e.g. by participation in meetings), evaluation of the results of the respective inter-laboratory study including an advanced report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

6. in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), validation of the test methods based on the results of the laboratories taking part in the ring tests;
7. assistance the project leader (and/or the ring test organizer for projects of WG 8) in planning the inter-laboratory studies;
8. in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), organization of the inter-laboratory studies of 22 projects by involving the participating laboratories (around 13 laboratories shall apply the new test method (validated data of at least 8 laboratories is required));
9. in cooperation with project leader (and/or the ring test organizer for projects of WG 8), statistical evaluation of the inter-laboratory studies on the test methods for the 22 projects including an advanced report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
10. attend preparatory meetings of the responsible Working Groups/Task Groups of CEN/TC 260 related to the inter-laboratory studies of the various test methods;
11. discussion of the results of the statistical evaluation of the inter-laboratory studies within the responsible Working Group and/or Task Group of CEN/TC 260;
12. data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
13. verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009.

#### Tasks for Project Group C:

Standardization projects that require assistance in the development of the respective method including organization of pre-ring test, if necessary, planning the respective inter-laboratory study, communication with the respective project leader and working and/or task group (e.g. by participation in meetings), evaluation of the results of the respective inter-laboratory study including an advanced report of this evaluation (to be approved by respective project leader and working and/or task group) and provision of a data collection tool for the laboratories participating in the ring tests (preferably via web platform):

14. in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), validation of the test methods based on the results of the laboratories taking part in the ring tests;
15. assistance the project leader (and/or the ring test organizer for projects of WG 8) in planning the inter-laboratory studies;
16. assist the project leader (and/or the ring test organizer for projects of WG 8) in method development including organization of pre-ring test, if necessary;
17. in cooperation with the project leader (and/or the ring test organizer for projects of WG 8), organization of the inter-laboratory studies of 11 projects by involving the participating laboratories (around 13 laboratories shall apply the new test method (validated data of at least 8 laboratories is required));
18. in cooperation with project leader (and/or the ring test organizer for projects of WG 8), statistical evaluation of the inter-laboratory studies on the test methods for the 11 projects including an advanced report containing the raw data, the statistical evaluation (including repeatability data, reproducibility data and outlier selection) and final validation of the method to be approved by the project leader and the responsible Working Group and/or Task Group of CEN/TC 260;
19. attend preparatory meetings of the responsible Working Groups/Task Groups of CEN/TC 260 related to the inter-laboratory studies of the various test methods;
20. discussion of the results of the statistical evaluation of the inter-laboratory studies within the responsible Working Group and/or Task Group of CEN/TC 260;
21. data collection of the results of the laboratories participating in the ring tests (preferably by providing a data collection tool via web platform);
22. verification that the statistical data show compliance with the tolerances stated in Regulation (EU) 2019/1009;
23. statistical support, especially for the validation of data on repeatability and reproducibility of the methods for all substances and for providing advice to the project leader in conducting any work which may require statistical advice.

The CONTRACTOR undertakes to perform its duties with reasonable care and skill applying recognized practices. The CONTRACTOR is not entitled to subcontract any rights and obligations of this Service contract without the prior written consent of DIN.

The selection procedure documented in the open call for tender, sections V, VI and VII selected the CONTRACTOR on the basis of its personal qualification and experience. All man days under this Service contract must therefore be performed by the CONTRACTOR in person. Any deviations from this must be justified in writing and authorized by the European Commission before any related funds can be disbursed.

In particular, the following target dates for each step shall be adhered to. In case of non-adherence to the target dates, the Commission/EFTA is entitled to cancel the funding.

Step 1: Approval of work programme, protocol and draft test method by responsible Working Group	1 January 2024
Step 2: Circulation of 1st Working Draft (stage 20.60)	1 September 2024
Step 3: Start of validation (inter-laboratory study)	1 February 2025
Step 4: Interim report on the status of the project	1 July 2025
Step 5: Report on final results of validation	1 October 2025
Step 6: prEN Enquiry Draft (stage code 30.99)	1 January 2026
Step 7: FprEN Formal Vote Draft (stage code 45.99)	1 January 2027
Step 8: Final report	1 July 2027

This results in the following estimation of the latest possible target dates for validation and evaluation (individual per project):

Step Validation 1: Approval of procedure for statistical evaluation by the responsible Working Group/Task Group of CEN/TC 260	1 January 2024
Step Validation 2: Pre ring-test (if necessary for projects of group C)	1 June 2024
Step Validation 3: Inter-laboratory study	1 February 2025
Step Validation 4: Final report on statistical evaluation approved by the responsible Working Group/Task Group of CEN/TC 260	1 October 2025

It is to be noted that dependent on the progress of the project development in responsibility of the project leader, action of the Statistician is required before the above-mentioned dates. Especially, if documents pass through one or more stages earlier than indicated, the Statisticians are obliged to start the work accordingly early. Specific projects are foreseen to reach the point for the necessary activities of the Statistician earlier. This will involve consultation with the project leader. For projects No 41, 42 and 43 in Annex B, target dates might be reached maximum 6 months later.

The CONTRACTOR has to record the expenses for material and human resources (including exact date and hours). These records have to be kept for 10 years for possible inspection by DIN or a charged legal institution. Upon request, DIN or a charged legal institution shall have unhindered access to the accounts and documents which may be required for auditing purposes.

<<in case the CONTRACTOR is from a non-EEA country, the following paragraph will be included: DIN and the CONTRACTOR aim to fulfil their duties in a way that takes into account their social and environmental responsibilities, including the delivery of sustainable livelihoods and development opportunities to people. The CONTRACTOR undertakes to meet the relevant social and environmental standards. In particular, the CONTRACTOR commits itself not to use child labour and adheres to the UN Convention on the Rights of the Child, and national / local law on the employment of children. The CONTRACTOR ensures that there is no forced labour in its workforce. The CONTRACTOR provides a safe and healthy working environment for employees. It complies, at a minimum, with national and local laws and ILO conventions on health and safety. Working hours and conditions for employees comply with conditions established by national and local laws and ILO conventions. If the CONTRACTOR is engaged in production, it undertakes to maximize the use of raw materials from sustainably managed sources in their ranges, buying locally when possible. It uses production technologies that seek to

reduce energy consumption and where possible use renewable energy technologies that minimize greenhouse gas emissions. It seeks to minimize the impact of its waste stream on the environment.>>

### 3. Obligations of DIN

DIN will send the CONTRACTOR on its request the final report of the project the CONTRACTOR participated in.

### 4. Invoicing and Payment

In consideration of the work carried out according to this Service contract, the CONTRACTOR shall invoice to DIN <<a maximum daily rate of xxx € per person-day up to a maximum of xx person-days and travel costs totalling a maximum sum of xx € >>>>. Invoicing shall be done as follows:

Step A: upon signature of this service contract: up to 15 % of above sum;

Step B: provision of interim report provided acceptance by the Commission of the interim report: up to 50 % of above sum;

Step C: provision of final report provided acceptance by the Commission of the final report: the remaining balance of the above sum.

The information is subject to changes in the Grant Agreement.

The invoice shall state the following VAT numbers:

DIN: UST-ID-Nr: DE 136 622 143

DIN: UST-Nr: 27/640/50470

CONTRACTOR VAT identification number: .....

The aforesaid sum shall be understood to cover all expenditure incurred by the CONTRACTOR in the performance of this contract.

The payments are due only if the CONTRACTOR has fulfilled the tasks within the given time schedule, DIN has approved the results and the CONTRACTOR has sent a detailed invoice (material, cost for staff, travel etc.) that fulfils the requirements described below. All items shall be based on real costs as actually incurred. Estimated costs shall not be invoiced.

DIN has the right to demand invoices and documentation of work done before paying.

Payments will be made to the CONTRACTOR with the following Bank details:

[Name of the Bank]

[Full address of Bank]

€ (EUR) Account No ...

IBAN (International Bank Account Number): ...

BIC or SWIFT CODE (Business Identifier Code): ...

Each invoice shall comply with the requirements listed in the annexed document from EC, and be accompanied by a declaration of the real costs incurred, clearly stating the number of days worked and the period within which the days were worked.

The declaration:

- must be signed;
- must specify that 'working days' means 'full working days'
- must specify the period within which the tasks were performed.

The signed declaration shall be in the following format:

"I the undersigned declare that I worked the following number of days (full working days) within the framework of my Service contract with DIN [reference of this Service contract]:

- in the reporting period [from .....to .....] [number] days."

The total amount that the CONTRACTOR will in fact receive depends on whether the defined tasks of the CONTRACTOR have been completed (the number of days actually spent by the CONTRACTOR in the context of this service contract, or the extent of tasks fulfilled if the number of man days was not specified).

Payment by DIN does not constitute acceptance of performance and is subject to the complete and due performance of the contract.

## **5. Provisions relating to fiscal charges**

The CONTRACTOR will remain responsible for all taxes imposed on it and other related obligations that arise as a result of this Service contract.

## **6. Responsibility and Liability**

DIN shall in no case, and under no circumstances, be held responsible for claims arising out of the present Service contract and relating to damages caused by the CONTRACTOR, its employees or a third party. No request of indemnity or re-instatement relating to such claims may be addressed to DIN.

The CONTRACTOR shall, in respect of the staff designated for the performance of this Service contract, observe all regulations of labour law, in particular the regulations of social security and fiscal law.

## **7. Confidentiality**

The CONTRACTOR undertakes to maintain confidentiality as regards all actions necessary to fulfil the contracted duties. Both parties commit themselves to mutual loyalty.

## **8. Copyright**

The CONTRACTOR undertakes to assign to DIN (or as DIN may direct) its patrimonial rights of exploitation and all and any intellectual property rights in the works developed by it under the scope of this Service contract.

Such assigned rights include reproduction rights including the publication, distribution, adjustment, translation, renting, loan, the remuneration rights for duplication and loan, as well as the rights of communication to the public of the works, in total or in part, in summary or with comments, and including the right to transfer all exploitation licences and to authorise all sub-licences.

The transfer of rights covers all languages and covers all forms of exploitation known at present and non-restrictively; publication by all means and via all graphical support systems, by print, press, photocopy, microfilms and via all magnetic, computerised and numerical support systems, memory cards, CD-ROMs, films, photographs, slides, teledistribution, cable, satellite, disks and online document servers.

For all and each of the assigned exploitation modes, the transfer is granted free of charge, for all countries and for the total duration of the intellectual property rights.

## **9. Termination**

Regardless of other claims, in the case of serious disrespect of the terms of the Service contract by the CONTRACTOR (inter alia where the work is not provided in accordance with the terms of this Service contract, or not completed within the time limits according to this Service contract), DIN may cancel the contract at any time without notice.

Should the performance of the project as a whole be obstructed or jeopardized by circumstances beyond the control of the parties, DIN may cancel the Service contract giving six weeks' notice.

## **10. Withdrawal**

DIN is entitled to withdraw from this Service contract if the European Commission/EFTA does not pay the funds to DIN or retroactively reclaims funds already paid to DIN under the Specific Grant Agreement, as any such payment is dependent on EC's acceptance of the interim and final reports defined in the Specific Grant Agreement.

## **11. Administrative provisions**

With the exception of invoices, all correspondence with DIN concerning the performance of this Service contract shall be addressed as follows:

Dr. Sophie Dithmer, Secretary CEN/TC 260, Phone: +49 30 2601-2647  
email: sophie.dithmer@din.de

All invoices to DIN shall be addressed as follows:

DIN Deutsches Institut für Normung e. V.  
Buchhaltung  
Am DIN-Platz  
Burggrafenstraße 6  
10787 Berlin

All correspondence with the CONTRACTOR shall be addressed as follows:

<<Mr/Ms NN Phone: , email>>

## **12. Assignment**

The CONTRACTOR shall not assign, transfer, subcontract or in any other manner make over to any third party the benefit and/or burden of this Service contract without the prior written consent of DIN.

## **13. Alterations to the Service contract**

Subsidiary agreements and modifications to this Service contract are only legally binding when in written form and signed by both parties. This applies also to any agreement by which such written form requirement is to be contracted out.

## **14. Validity**

If any of the provisions of this Service contract shall become or be held invalid or unenforceable, this shall not affect any part of the remaining contract.

## **15. Place of jurisdiction**

Place of jurisdiction for all disputes arising out of or in connection with this Service contract shall be Berlin.

## **16. Applicable Law**

This Service contract shall be governed by and interpreted in accordance with German Law.

For DIN Deutsches Institut für Normung e. V.

For the CONTRACTOR

.....  
Christoph Winterhalter  
Chairman of the Executive Board  
(Stamp)

(Date)

.....  
<<Name, Position>>  
(Stamp)

(Date)

.....  
i. V. Matthias Kritzler-Picht  
Head of G Food, Packaging, Plastics

(Date)



# Annex 1

## EC Mandatory Content of an Invoice

### Supplier information

Compulsory information for an invoice for all or majority of member states	Compulsory information for an invoice for certain member states only
<b>Full name of the supplier</b>	
<b>Full address of the supplier</b>	
<b>The VAT identification number of the supplier</b> in accordance with ISO Standard under which he supplied the goods and services  (for all member states <b>except Bulgaria</b> )	<b>For Bulgaria, Cyprus, Germany, Greece, Romania, Slovakia:</b>  <b>Tax reference number of the supplier</b> , in other cases, where your country refrains from allocating a VAT identification number in accordance with ISO Standard for certain cases
	<b>For Belgium, Cyprus, Denmark, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland Portugal, Romania, Slovenia:</b>  <ul style="list-style-type: none"> <li>• <b>Full name of tax representative (if any) of the supplier</b> where the person liable to pay VAT is the tax representative,</li> <li>• <b>Full address of the tax representative (if any)</b> of the supplier where the person liable to pay VAT is the tax representative,</li> <li>• <b>VAT identification number of the fiscal representative</b> in accordance with ISO Standard (if any) of the supplier where the person liable to pay the VAT is the tax representative.</li> </ul>

### Customer information

Compulsory information for an invoice for all or majority of member states	Compulsory information for an invoice for certain member states only
<b>Full name of the customer</b>	
<b>Full address of the customer</b>	
<b>The VAT identification number of the customer</b> in accordance with ISO Standard where the customer is liable to pay the VAT or in case of intra-Community supplies ( <b>except for Bulgaria</b> )	<b>For Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Germany, Greece, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovak Republic, Spain:</b>  <b>The VAT identification number of the customer in other cases than general rule.</b>
	<b>For Belgium, Cyprus, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Romania, Slovenia:</b>  <ul style="list-style-type: none"> <li>• <b>Full name of the tax representative (if any)</b> of the customer where the person liable to pay VAT is the tax representative</li> <li>• <b>Full address of the tax representative (if any)</b> of the customer where the person liable to pay VAT is the tax representative</li> <li>• <b>VAT identification number of the fiscal representative (if any)</b> the customer where the person liable to pay the VAT is the tax representative</li> </ul>

**Content information**

Compulsory information for an invoice for all or majority of member states	Compulsory information for an invoice for certain member states only
<ul style="list-style-type: none"> <li>• Sequential number based on one or more series, which uniquely identifies the invoice</li> <li>• Date of issue of the invoice</li> <li>• Date on which the supply of goods or services was made or completed or the date on which the payment on account was made before any supply, insofar as that a date can be determined and differs from the date of issue of the invoice (<b>except for Bulgaria</b>)</li> <li>• Description/nature of the goods or services</li> <li>• Quantity of the goods supplied or the extent and nature of the services rendered</li> <li>• Price per unit (excluding VAT) (<b>except for Germany</b>)</li> <li>• Any discounts or rebates, not included in the unit price (<b>except for Austria</b>)</li> <li>• Taxable amount per VAT rate or exemption</li> <li>• VAT rate(s) applied</li> <li>• Total VAT amount</li> </ul>	<p>Where an exemption is involved or where the customer is liable to pay the tax further information should be given accordingly :</p> <ul style="list-style-type: none"> <li>• Reference to the appropriate provision of the Sixth directive for:  <b>Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France Germany, Ireland Lithuania Luxembourg, Netherlands, Poland, Portugal, Sweden, Spain, UK</b></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Reference to the corresponding national provision for:  <b>Czech Republic, Greece, Hungary, Italy, Latvia, Malta, Slovak Republic, Slovenia, Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France Germany, Ireland Lithuania Luxembourg, Netherlands, Poland, Portugal, Sweden, Spain, UK</b></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• Any indication that the supply is exempt or subject to the reverse charge procedure for:  <b>Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France Germany, Greece, Hungary, Ireland, Luxembourg, Malta, Portugal, Romania, Netherlands, Poland, Sweden, Spain, UK</b></li> </ul>
	<p><b>For Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France Greece, Hungary, Ireland, Italy, Malta, Netherlands, Latvia, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovak Republic, Slovenia, Sweden, Spain, UK:</b></p> <p>Obligation to mention the amounts on the invoice in the local currency</p>
	<p><b>For Bulgaria, Greece, Hungary, Lithuania, Poland, Romania, UK:</b></p> <p>Obligation to issue the invoice in one of the official languages</p>

**WARNING: the issuer of the invoice should follow the VAT legislation in force at the time the invoice is issued**

## Annex 2

### List of projects (as of September 2023)

<b>Project Group A</b>	
<b>1.</b>	<b><i>Inorganic fertilizers – Determination of total nitrogen in methylene urea and urea formaldehyde (revision of EN 15478:2009)</i></b>
	Scope: This document specifies a method for the determination of the content of total nitrogen from methylene-urea and urea formaldehyde in their pure form in inorganic fertilizers.
	Responsible working group: CEN/TC 260/WG 7
<b>2.</b>	<b><i>Inorganic fertilizers – Determination of the total K<sub>2</sub>O content</i></b>
	Scope: This document specifies two different methods (Method A and B) for the determination of the content of potassium (expressed as K <sub>2</sub> O) in inorganic fertilizers. Method A specifies a gravimetric method. Method B specifies the method using inductively coupled plasma optical emission spectrometry (ICP-OES).
	Note: Project should include 2 methods (gravimetric and ICP-OES method), i.e., 1 project and 1 combined ILS, which means the same samples should be extracted and K <sub>2</sub> O should be determined with both methods on same extract.
	Responsible working group: CEN/TC 260/WG 7
<b>3.</b>	<b><i>Inorganic fertilizers - Determination of the combustible ingredient content in ammonium nitrate fertilizers of high nitrogen content</i></b>
	Scope: This document specifies a method for the determination of the combustible ingredient content in ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>4.</b>	<b><i>Inorganic fertilizers - Determination of pH of a solution of ammonium nitrate fertilizer of high nitrogen content (revision of CEN/TS 17759:2022)</i></b>
	Scope: This document specifies a method for the determination of pH of a solution of ammonium nitrate fertilizer of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>5.</b>	<b><i>Inorganic fertilizers - Determination of particle size of ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17760:2022)</i></b>
	Scope: This document specifies a method for the determination of particle size of ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>6.</b>	<b><i>Inorganic fertilizers - Determination of the chloride content in ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17761:2022)</i></b>
	Scope: This document specifies a method for the determination of the chloride content in ammonium nitrate fertilizers of high nitrogen content.

	Responsible working group: CEN/TC 260/WG 7
<b>7.</b>	<b><i>Inorganic fertilizers - Determination of the copper content in ammonium nitrate fertilizers of high nitrogen content (revision of CEN/TS 17762:2022)</i></b>
	Scope: This document specifies a method for the determination of the copper content in ammonium nitrate fertilizers of high nitrogen content.
	Responsible working group: CEN/TC 260/WG 7
<b>8.</b>	<b><i>Inorganic fertilizers - Determination of the organic carbon content</i></b>
	Scope: This document specifies a method for the organic carbon content of inorganic fertilizers.
	Responsible working group: CEN/TC 260/WG 7
<b>9.</b>	<b><i>Fertilizers - Determination of cold water insoluble nitrogen and hot water insoluble nitrogen in solid urea formaldehyde and methylene urea slow-release fertilizers and determination of the solubility of nutrient polymers in phosphate buffer solution with a pH of 7,5 at 100 °C (revision of CEN/TS 17403:2021)</i></b>
	Scope: This document specifies a method for the determination of the cold and hot water insoluble nitrogen content in solid urea formaldehyde and methylene urea slow release fertilizers and for the determination of the solubility of nutrient polymers in a phosphate buffer solution with a pH of 7,5 at 100 °C.
	Responsible working group: CEN/TC 260/WG 7
<b>10.</b>	<b><i>Determination of the final degradation products of nutrient polymers when used in fertilizing products</i></b>
	Scope: This document specifies a method for the determination of the final degradation products (ammonia and carbon dioxide) of nutrient polymers when used in fertilizing products.
	Responsible working group: CEN/TC 260/WG 7
<b>11.</b>	<b><i>Determination of the free formaldehyde content in nutrient polymers when used in fertilizing products</i></b>
	Scope: This document specifies methods for the determination of the free formaldehyde content in solid nutrient polymers (method A) and in liquid nutrient polymers (method B).
	Responsible working group: CEN/TC 260/WG 7
<b>12.</b>	<b><i>Fertilizers and liming materials – Determination of the chloride content by potentiometric titration (revision of CEN/TS 17758:2022)</i></b>
	Scope: This document specifies a method for the determination of the chloride content in organic fertilizers, organo-mineral fertilizers, inorganic fertilizers and liming materials by potentiometric titration.
	Responsible working group: CEN/TC 260/WG 7
<b>13.</b>	<b><i>Inorganic fertilizers and liming materials - Determination of cadmium, chromium, lead, nickel, copper and zinc by inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution (revision of EN 16319:2013+A1:2014)</i></b>

	<p>Scope:</p> <p>This document specifies method for the determination of the content of cadmium, chromium, nickel, lead, copper and zinc in inorganic fertilizers and liming materials using inductively coupled plasma-atomic emission spectrometry (ICP-AES) after aqua regia dissolution. Limits of quantification are dependent on the sample matrix as well as on the instrument, but can roughly be expected to be 0,3mg/kg for Cd and 1mg/kg for Cr, Ni and Pb.</p>
	<p>Note: The method is already validated for cadmium, chromium, lead and nickel. The validation of the revision will only include copper and zinc.</p>
	<p>Responsible working group: CEN/TC 260/WG 3</p>
<p><b>Project Group B</b></p>	
14.	<p><b><i>Fertilizing products - Determination of the stability of fertilizing products containing micronutrient chelates at different pHs (revision of CEN/TS 17782:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the soluble metal that remains in solution at different pHs after the application of a solution of the fertilizer substance containing micronutrient chelates in a tap water solution used as a reference. The method applies to fertilizing products containing chelated micronutrients.</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
15.	<p><b><i>Fertilizing products - Determination of the stability of fertilizing products containing micronutrient complexes (revision of CEN/TS 17783:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the soluble metal that remains in solution after the application of a solution of the fertilizer substance containing micronutrient complexes in water and adjusting the pH to 6 and pH 7 for at least one day. The method applies to fertilizing products containing micronutrient complexes.</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
16.	<p><b><i>Inorganic micronutrient fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients - Part 1: Treatment with a cation exchange resin (revision of CEN/TS 17786-1:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the chelated iron content and the chelated fraction of iron, in UVCB chelats, EDDHA, EDDHMA, HBED, EDDHSA, in inorganic micronutrient fertilizers by the treatment with a cation exchange resin.</p> <p>The limit of determination of the chelated iron content highly depends on the specific electrical conductivity of the sample, on the amount of nutrient present, and varies between 0,005 % in simple matrices with high amounts of micronutrient and 0,5 % in more complex cases (see 9.1).</p>
	<p>Responsible working group: CEN/TC 260/WG 5</p>
17.	<p><b><i>Inorganic micronutrient fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients - Part 2: Determination of EDTA, DTPA, HEEDTA, IDHA or EDDS (revision of CEN/TS 17786-2:2022)</i></b></p>
	<p>Scope:</p> <p>This document specifies a method for the determination of the chelated fraction of micronutrients for fertilizers containing one or many micronutrients chelated by EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS in fertilizers.</p> <p>This method is used for inorganic micronutrient fertilizers when micronutrients are chelated</p>

	<p>only by EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS or for mixtures in which EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS is one of the chelating agents.</p> <p>The method is applicable to all inorganic micronutrient fertilizers containing EDTA, DTPA, HEEDTA, IDHA or [S,S]-EDDS as chelating agent for contents &gt; 0,1 % (w/w).</p> <p>The method is based on ICP or AAS measurement of the concentration of micronutrients according to EN 16963 or EN 16965 after water extraction according to EN 16962 and LC measurement of the chelating agents according to EN 15950, EN 13368-1 and EN 13368-3.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>18.</b>	<b><i>Inorganic micronutrient fertilizers - Determination of the concentration of free, chelated or complexed micronutrients and the chelating and/or complexing agents present in compound inorganic micronutrient fertilizers (revision of CEN/TS 17764:2022)</i></b>
	<p>Scope:</p> <p>This document specifies the method for the determination of free, chelated or complexed micronutrients and chelating and/or complexing agents present in compound inorganic micronutrient fertilizers. This method applies to compound inorganic micronutrient fertilizers when micronutrients are chelated and/or complexed. The method is based on the determination of the following specific parameters : - the water-soluble micronutrient concentration; - the fraction of chelated micronutrients in relation; - identification of chelating agents EDTA, DTPA, HEEDTA, IDHA, [S,S]-EDDS, [o,o] EDDHA, [o,o] EDDHMA, [o,p] EDDHA, HBED and ED-DHSA; - the fraction of complexed micronutrients; - identification of complexing agents (lignosulfonates, heptagluconic acid (HGA)). The method is based on - ICP (inductive coupled plasma) or FAAS (flame atomic absorption spectrometry) measurement of the concentration of water-soluble micronutrients according to EN 16963 or EN 16965 after extraction according to EN 16962; - LC (liquid chromatography) measurement of the chelating agents according to EN 15950, EN 13368-1, EN 13368-2, EN 13368-3, EN 15451, EN 15452; and/or complexing agents according to EN 16109 and EN 16847; - determination of the concentration of chelated micronutrients by CEN/TS 17786-1 and/or CEN/TS 17786-2; - determination of the complexed micronutrients by EN 15962. To avoid duplication of the analytical methods, CEN/TS 17786-2 describes the determination of micronutrients and the identification and determination of chelating agents.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>19.</b>	<b><i>Fertilizing products – Demonstration of efficacy of nitrification inhibitors</i></b>
	<p>Scope:</p> <p>This document specifies a method for the demonstration of the efficacy of nitrification inhibitors in fertilizing products.</p>
	Responsible working group: CEN/TC 260/WG 7
<b>20.</b>	<b><i>Fertilizing products – Demonstration of efficacy of urease inhibitors</i></b>
	<p>Scope:</p> <p>This document specifies a method for the demonstration of the efficacy of urease inhibitors in fertilizing products.</p>
	Responsible working group: CEN/TC 260/WG 7
<b>21.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the total content of specific elements by ICP-AES after digestion by aqua regia (revision of CEN/TS 17770:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination of elements in organic fertilizers and organo-mineral fertilizers digests using inductively coupled plasma-atomic emission spectrometry (ICP-AES). NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same</p>

	<p>results. This method is applicable to aqua regia digests prepared according to CEN/TS 17768 for the determination of P, K, Ca, Mg, Na, S, B, Co, Cu, Fe, Mn, Mo, Zn, As, Cd, Cr, Ni, Pb by ICP-AES. The method can be used for the determination of other elements, provided the user has verified the applicability.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>22.</b>	<b><i>Organic and organo-mineral fertilizers - Digestion by aqua regia for subsequent determination of elements (revision of CEN/TS 17768:2022)</i></b>
	<p>Scope:</p> <p>This document specifies the procedure for the digestion of different organic fertilizers and organo-mineral fertilizers with aqua regia to enable a subsequent determination of elements. The extracts are suitable for analysis using CEN/TS 17770 and CEN/TS 17769.</p> <p>NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>23.</b>	<b><i>Organic and organo-mineral fertilizers – Determination of the content of specific elements by ICP-AES after extraction by water (revision of CEN/TS 17774:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination of boron (B), cobalt (Co), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo) and zinc (Zn) in organic fertilizers and organo-mineral fertilizers extracts using inductively coupled plasma-atomic emission spectrometry (ICP-AES). NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results. This method is applicable to water extracts prepared according to CEN/TS 17766. The method can be used for the determination of other elements, provided the user has verified the applicability.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>24.</b>	<b><i>Organic and organo-mineral fertilizers - Extraction by water for subsequent determination of elements (revision of CEN/TS 17766:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the extraction by water for the subsequent determination of elements. The extracts are suitable for analysis using CEN/TS 17774. NOTE Alternatively, inductively coupled plasma mass spectrometry (ICP-MS) can be used for the measurement if the user proves that the method gives the same results. The method is applicable to organic and organo-mineral fertilizers.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>25.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the dry matter content (revision of CEN/TS 17773:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends. This document specifies the procedure for the determination and calculation of the dry matter fraction of organic and organo-mineral fertilizers for which the results of the performed analysis are calculated to the dry matter basis.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>26.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the chromium VI content (revision of CEN/TS 17778:2022)</i></b>

	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [3]. However, the present method was not validated on blends. This document specifies a method for the determination of hexavalent chromium (chromium (VI)) in organic and organo-mineral fertilizers. The method described is suitable to quantify the chromium (VI) content in organic and organo-mineral fertilizers down to 2 mg/kg dry matter. The results obtained from this method are strictly dependent on the extraction conditions. Results obtained by using other extraction procedures (extraction solution, pH of the extraction solution, extraction time, extraction temperature, etc.) are not comparable with the results produced by the procedure described in this document.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>27.</b>	<b><i>Organic and organo-mineral fertilizers Determination of mercury content (revision of CEN/TS 17769:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for determination of the content of mercury (Hg) in organic fertilizers and organo-mineral fertilizers using (cold) vapour generation apparatus coupled to an atomic absorption spectrophotometer and a method using a direct amalgamation technique. It is applicable to aqua regia digests prepared according to CEN/TS 17768. NOTE It is also possible to use other suitable methods for the determination of mercury described in Annex A if users prove that the method gives the same results as the methods described in this standard.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>28.</b>	<b><i>Organo-mineral fertilizers - Identification of complexing agents - Part 1: Method using UV-Vis spectrophotometry and gravimetry (revision of CEN/TS 17784-1:2022)</i></b>
	<p>Scope:</p> <p>This document specifies two methods required for the identification of lignosulfonate by UV-Vis spectrophotometry (method A) and gravimetry (method B) in organo-mineral fertilizers.</p> <p>NOTE Lignosulfonate, as a complexing agent, is a natural polymer produced as a by-product of the sulfite method for manufacturing paper from wood pulp in the paper industry. As a natural polymer, it presents a poorly defined and variable chemical structure. It is an intricate mixture of small- to moderate-sized polymeric compounds with sulfonate groups attached to the molecule, and diverse complexing capacity.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>29.</b>	<b><i>Organo-mineral fertilizers - Identification of complexing agents - Part 2: Method using high-performance liquid chromatography (HPLC) (revision of CEN/TS 17784-2:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a chromatographic method which allows the identification of heptagluconic acid (HGA) in organo-mineral fertilizers containing heptagluconic acid metal complexes.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>30.</b>	<b><i>Organo-mineral fertilizers - Determination of the chelated micronutrient content and the chelated fraction of micronutrients by treatment with a cation exchange resin (revision of CEN/TS 17790:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination of the chelated micronutrient content and the chelated fraction of a micronutrient, in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, etc), algae</p>



	extract, and animal meal (feather, bones, blood, etc) and containing UVCB, EDDHA, EDDHMA, HBED, EDDHSA micronutrients by the treatment with a cation exchange resin. The limit of determination of the chelated micronutrient content highly depends on the specific electrical conductivity of the sample, on the amount of nutrient present, and varies between 0,005 % in simple matrices with high amounts of micronutrient, and 0,5 % in more complex cases (see 9.1).
	Responsible working group: CEN/TC 260/WG 5
<b>31.</b>	<b><i>Organo-mineral fertilizers - Identification of chelating agents - Part 1: Determination of EDTA, HEEDTA and DTPA by ion chromatography (revision of CEN/TS 17789-1:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination by ion chromatography of the total amount of each of the individual chelating agents EDTA, HEEDTA, and DTPA in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, ...), algae extract, and animal meal (feather, bones, blood, ...) and containing one or more of these substances.</p> <p>The method allows the identification and the determination of the total water-soluble fraction of each of these chelating agents. It does not allow to distinguish between the free form and the metal bound form of the chelating agents.</p> <p>This method applies to organo-mineral fertilizers containing chelates of one or more of the following micronutrients: cobalt, copper, iron, manganese, zinc and with a mass fraction of at least 0,1 %.</p>
	Responsible working group: CEN/TC 260/WG 5
<b>32.</b>	<b><i>Organo-mineral fertilizers - Identification of chelating agents - Part 2: Determination of Fe chelated by [o,o] EDDHA, [o,o] EDDHMA and HBED, or the amount of chelating agents by ion pair chromatography (revision of CEN/TS 17789-2:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for the determination by ion pair chromatography of the iron chelated by each individual ortho(hydroxy)-ortho(hydroxy) isomer of the chelating agents [o,o] EDDHA, [o,o] EDDHMA and by HBED in organo-mineral fertilizers, having an organic matrix based on vegetal residues (cocoa shells, grape residue, soybean residue, ...), algae extract, and animal meal (feather, bones, blood, ...) and containing one or more of these substances, except for [o,o] EDDHMA and HBED mixes.</p> <p>The method allows the identification and the determination of the total concentration of water soluble iron chelates of these chelating agents. Also, after derivatization with Fe, the soluble amount of the chelating agents can be determined when other micronutrients beside Fe are present in organo-mineral fertilizers containing [o,o] EDDHA, [o,o] EDDHMA or HBED.</p> <p>This method is applicable to a mass fraction of the metal chelated of at least 0,625 %.</p> <p>NOTE 1 The substances EDDHA and EDDHMA exist as several different isomeric forms. Positional isomers for the hydroxyl or methyl groups (in ortho, meta, and para positions) as well as stereo isomers (meso and dl-racemic forms) are known. Both meso and dl-racemic forms of the [ortho,ortho] EDDHA and [ortho,ortho]. Since para, meta and ortho methyl positional isomers of the EDDHMA present quite similar stability, they could be grouped: in the method here described the para, meta and ortho methyl positional isomers of the [o,o] EDDHMA are considered together. HBED (N,N'-bis(2-hydroxybenzyl)-ethylenediamine-N,N'-diacetic acid) does not present isomeric forms.</p> <p>NOTE 2 At present, analytically pure standards only exist for [ortho,ortho] EDDHA, [ortho,ortho] EDDHMA and HBED. All other substances being unavailable as a standard, the influence of their eventual presence in the samples (with respect to the sensitivity and the selectivity of this method) has not been studied.</p> <p>NOTE 3 The meso and the dl-racemic forms of [o,o] EDDHA and [o,o] EDDHMA can be de-</p>

	terminated separately by this method.
	Responsible working group: CEN/TC 260/WG 5
<b>33.</b>	<b><i>Organo-mineral fertilizers - Determination of the fraction of complexed micronutrients (revision of CEN/TS 17788:2022)</i></b>
	Scope:  This document specifies a general method for the determination of the micronutrients complexed by complexing agents in organo-mineral fertilizers. The method allows the determination of the total concentration of each complexed micronutrient in complexes after subtraction of the chelated micro-nutrients content, but it does not identify the individual complexing agents. This procedure concerns EU organo-mineral fertilizing products which contain complexed micro-nutrients covered by Regulation (EU) 2019/1009 [6]. The method is applicable to a mass fraction of the metal complexed of at least 0,07 %, 0,006 % and 0,035 % of Fe, Mn and Zn respectively (see [7]). A lower limit of quantification has not been established for Cu and Co.
	Responsible working group: CEN/TC 260/WG 5
<b>34.</b>	<b><i>Organo-mineral fertilizers – Extraction of phosphorus by formic acid (revision of CEN/TS 17767:2022)</i></b>
	Scope:  This document specifies the procedure for the extraction of phosphorus in 2 % formic acid (20 g/l), representing the amount of soft natural phosphates. The method is applicable to organo-mineral fertilizers.
	Responsible working group: CEN/TC 260/WG 8
<b>35.</b>	<b><i>Organo-mineral fertilizers - Extraction of phosphorus, which is soluble in neutral ammonium citrate (revision of CEN/TS 17779:2022)</i></b>
	Scope:  This document specifies a method for the extraction of phosphorus soluble in neutral ammonium citrate. The method is applicable to organo-mineral fertilizers.
	Responsible working group: CEN/TC 260/WG 8
<b>Project Group C</b>	
<b>36.</b>	<b><i>Fertilizers and liming materials - Determination of the phosphonates content in organic, organo-mineral and inorganic fertilizers, liming materials and inhibitors</i></b>
	Scope: This document specifies methods for the determination of the phosphonates content in organic, organo-mineral and inorganic fertilizers, liming materials and inhibitors.
	Responsible working group: CEN/TC 260/WG 3
<b>37.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the total organic carbon (TOC) content by dry combustion (revision of CEN/TS 17776:2022)</i></b>
	Scope:  This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [5]. However, the present method was not validated for blends. This document specifies a method for the determination of total organic carbon (TOC) by elemental analysis using dry combustion. The method is applicable to organic and organo-mineral fertilizers containing more than 1 g carbon per kg of dry matter (0,1 %), with the exclusion of organo-mineral fertilizers containing urea-formaldehyde polymers as long as there is no method available to assess carbon in urea-formaldehyde polymers.

	Responsible working group: CEN/TC 260/WG 8
<b>38.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the biuret content by high-performance liquid chromatography (HPLC) (revision of CEN/TS 17765:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [4]. However, the present method was not validated for blends. This document specifies a method for the determination of the biuret content by high-performance liquid chromatography (HPLC) with UV detector. The method is applicable to organic and organo-mineral fertilizers containing urea. Nowadays, there is a method standardized as EN 15479 that allows the determination of biuret in urea by spectrophotometric detection. Organic and organo-mineral fertilizers contain organic matter and other compounds apart from urea that would interfere in a spectrophotometric method. HPLC allows an accurate determination of biuret by separating it from possible interfering compounds [2] [3].</p>
	Responsible working group: CEN/TC 260/WG 8
<b>39.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the inorganic arsenic content (revision of CEN/TS 17775:2022)</i></b>
	<p>Scope:</p> <p>This document specifies a method for extraction, separation, and determination of inorganic arsenic (iAs) in organic or organo-mineral fertilizers using anion-exchange HPLC or IC coupled to ICP-MS.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>40.</b>	<b><i>Organic and organo-mineral fertilizers - Determination of the nitrogen content (revision of CEN/TS 17771:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) or PFC 1(B) of Regulation (EU) 2019/1009 [5]. However, the present method was not validated for blends. This document specifies a method for the determination of the total nitrogen content and the content of ammoniacal, nitric, ureic and organic nitrogen in organic and organo-mineral fertilizers. This method is based on EN 15604:2009 and adapted to be applicable to organic and organo-mineral fertilizers.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>41.</b>	<b><i>Organic, organo-mineral and inorganic fertilizers - Detection of Salmonella spp (revision of CEN/TS 17780:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC 1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends. This document specifies a method for the detection of Salmonella spp. in organic, organo-mineral and inorganic fertilizers. The method is based on EN ISO 6579-1 and its validated alternative methods for the detection of Salmonella spp. in food and feeding stuff. It requires three successive steps: A selective enrichment, an isolation on a chromogenic agar, and if positive a confirmation with a serological test (and if required, a selective media).</p>
	Responsible working group: CEN/TC 260/WG 8
<b>42.</b>	<b><i>Organic, organo-mineral and inorganic fertilizers - Detection of Escherichia coli (revision of CEN/TS 17781:2022)</i></b>
	<p>Scope:</p> <p>This document is applicable to fertilizing products, which are classified as PFC 1(A) and PFC</p>

	<p>1(B) or the PFC 1(A) and PFC 1(B) component in PFC 7 of Regulation (EU) 2019/1009 [1]. However, the present method was not validated for blends.</p> <p>This document specifies a colony-count technique at 44 °C on a solid medium containing a chromogenic ingredient for the detection of the enzyme <math>\beta</math>-glucuronidase. The method is based on ISO 16649-2 [4].</p> <p>Strains of <i>Escherichia coli</i> which do not grow at 44 °C and, in particular, those that are <math>\beta</math>-glucuronidase negative, such as <i>Escherichia coli</i> O157, will not be detected. Detected microorganisms are presumptively determined <math>\beta</math>-glucuronidase-positive <i>Escherichia coli</i>, since some Enterobacteriaceae, in particular <i>Shigella</i> and <i>Salmonella</i>, can also show <math>\beta</math>-glucuronidase activity at 44 °C.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>43.</b>	<b><i>Organic, organo-mineral and inorganic fertilizers - Detection of Enterococaceae (revision of CEN/TS 17804:2022)</i></b>
	<p>Scope :</p> <p>This document specifies a method for the detection and enumeration of <i>Enterococaceae</i> in fertilizers of the following Product Function Categories (PFCs) of EU fertilizing products, as described in Regulation (EU) 2019/1009 [1]:</p> <p style="padding-left: 40px;">PFC 1(A): Organic fertilizer;</p> <p style="padding-left: 40px;">PFC 1(B): Organo-mineral fertilizer;</p> <p style="padding-left: 40px;">PFC 1(C): Inorganic fertilizer, which contains more than 1 % by mass of organic carbon, other than organic carbon from chelating or complexing agents, nitrification inhibitors, denitrification inhibitors or urease inhibitors, coating agents, urea or calcium cyanamide. The present method was validated on products known as present on the market in April 2021 and conform to Regulation (EU) 2019/1009 [1] that are inorganic fertilizers with more than 1 % of organic carbon such as poultry manure and struvite with low level of organic matter. In case that other products would be developed having other physical and chemical characteristics, it might become necessary to develop different methods to correctly account for pathogens they might contain.</p> <p>This document specifies a colony-count technique on selective media, Slanetz Bartley agar or Bile Esculin Azide agar, respectively. The method is based on EN ISO 7899-2:2000.</p>
	Responsible working group: CEN/TC 260/WG 8
<b>44.</b>	<b><i>Organo-mineral fertilizers - Determination of the urease inhibitor content</i></b>
	Scope: This document specifies a method for the determination of the urease inhibitor N-(n-butyl)thiophosphoric triamide (NBPT) in organo-mineral fertilizers.
	Note: A European Standard can be developed under the condition that urease inhibitors (NBPT) and its metabolites are determined. It is not possible to show any urease inhibitor in a complex fertilizer such as organo-mineral fertilizer. Currently, an interlaboratory-study can include spiked samples because products are not on the market but are expected to be on the market in the coming years.
	Responsible working group: CEN/TC 260/WG 7
<b>45.</b>	<b><i>Inorganic fertilizers – Determination of monocarbamide dihydrogen sulphate (MCDHS)</i></b>
	Scope: This document specifies a method for the determination of monocarbamide dihydrogen sulphate (MCDHS) in inorganic fertilizers.
	Responsible working group: CEN/TC 260/WG 7
<b>46.</b>	<b><i>Inhibitors — Determination of the chloride content by ion chromatography</i></b>
	Scope:

	This document specifies a method for the determination of the chloride content in inhibitors by ion chromatography.
	Responsible working group: CEN/TC 260/WG 7