

Organic and organo-mineral fertilizers - Determination of the mercury content

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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Organic and organo-mineral fertilizers - Determination of the mercury content

Engrais organiques et organo-minéraux - Détermination de la teneur en mercure

Organische und organisch-mineralische Düngemittel -Bestimmung des Quecksilbergehaltes

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European foreword

This document (CEN/TS 17769:2022) has been prepared by Technical Committee CEN/TC 260 "Fertilizers and liming materials", the secretariat of which is held by DIN.

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Introduction

This document concerns the analytical measurement step for the determination of mercury in organic fertilizers and organo-mineral fertilizers after digestion by aqua regia according to CEN/TS 17768. The document covers cold vapour generation followed by mercury determination using atomic absorption spectrophotometry (AAS). Different cold vapour generation techniques can be used (flow injection, segmented flow, batch). The document also includes a method based on a direct amalgamation technique which is widely used in many analytical laboratories. It is also possible to use other suitable methods of mercury determination described in Annex A, if users prove that the methods give the same results as the methods described in this document.

1 Scope

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.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 17773, Organic and organo-mineral fertilizers — Determination of the dry matter content

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