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STANDARDS
INSTITUTE

**SVENSK STANDARD
SS-EN 14672:2005**

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Utgåva 1

**Karaktärisering av slam – Bestämning av
totalfosfor**

**Characterization of sludges – Determination of
total phosphorus**

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ICS 13.030.20

English version

Characterization of sludges - Determination of total phosphorus

Caractérisation des boues - Dosage du phosphore total

Charakterisierung von Schlämmen - Bestimmung von
Gesamtphosphor

This European Standard was approved by CEN on 27 June 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This European Standard (EN 14672:2005) has been prepared by Technical Committee CEN/TC 308 "Characterization of sludges", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2006, and conflicting national standards shall be withdrawn at the latest by February 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 14672:2005 (E)

1 Scope

This European Standard specifies a procedure for complete digestion of raw/digested sludge, suitable for the subsequent determination of phosphorus.

NOTE Phosphorus in environmental samples can be present in many forms. This method of pre-treatment enables the analyst to determine all forms - i.e. total phosphorus, by quantitative oxidation yielding an aqueous solution of orthophosphate which should be analysed for phosphate according to method EN ISO 6878, EN ISO 10304-2 or an equivalent validated method.

The range of the method is up to 50 g/kg P assuming appropriate dilution of the digest in the final measurement step.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 12880:2000, *Characterization of sludges — Determination of dry residue and water content*

EN ISO 3696, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

EN ISO 6878, *Water quality — Determination of phosphorus — Ammonium molybdat spectrometric method (ISO 6878:2004)*

EN ISO 10304-2, *Water quality — Determination of dissolved anions by liquid chromatography of ions — Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)*

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

total phosphorus

phosphorus converted to orthophosphate by oxidation.

NOTE This includes condensed phosphates (e.g. pyro and polyphosphates), organophosphorus (e.g. phosphate esters and aminophosphonic acids) and free phosphates

3.2

dry residue

dry mass portion of the sludge obtained after the specified drying process. It is expressed as percent

[EN 12880:2000, 3.1]

3.3

dry mass (dry matter)

mass of solid obtained after the specified drying process. It is expressed as grams or kilograms

[EN 12880:2000, 3.3]