



SLOVENSKI STANDARD

oSIST prEN 18103:2024

01-julij-2024

Anorganska gnojila - Določanje dušika v polimerih hranil v prisotnosti drugih oblik dušika

Inorganic fertilizers - Determination of nutrient polymers nitrogen in the presence of other nitrogenous forms

Anorganische Düngemittel - Bestimmung von Nährstoff-Polymer-Stickstoff in Anwesenheit anderer stickstoffhaltiger Formen

Ta slovenski standard je istoveten z: prEN 18103

<https://standards.iteh.ai/catalog/standards/sist/087fa381-8cb8-486d-907b-79f8515a2610/osist-pren-18103-2024>

ICS:

65.080

Gnojila

Fertilizers

oSIST prEN 18103:2024

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 18103

June 2024

ICS 65.080

English Version

**Inorganic fertilizers - Determination of nutrient polymers
nitrogen in the presence of other nitrogenous forms**

Anorganische Düngemittel - Bestimmung von
Nährstoff-Polymer-Stickstoff in Anwesenheit anderer
stickstoffhaltiger Formen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 260.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Principle	4
5 Sampling and sample preparation	5
6 Procedure	6
7 Test report.....	11
Annex A (informative) Stannous chloride solution	12
Annex B (informative) Overview of subclauses to determine the various nitrogen forms	13
Bibliography.....	14

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[oSIST prEN 18103:2024](https://standards.iteh.ai/catalog/standards/sist/087fa381-8cb8-486d-907b-79f8515a2610/osist-pren-18103-2024)

<https://standards.iteh.ai/catalog/standards/sist/087fa381-8cb8-486d-907b-79f8515a2610/osist-pren-18103-2024>

European foreword

This document (prEN 18103:2024) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[oSIST prEN 18103:2024](https://standards.itih.ai/catalog/standards/sist/087fa381-8cb8-486d-907b-79f8515a2610/osist-pren-18103-2024)

<https://standards.itih.ai/catalog/standards/sist/087fa381-8cb8-486d-907b-79f8515a2610/osist-pren-18103-2024>

1 Scope

This document specifies a method for the determination of nutrient polymers nitrogen in presence of the other forms of nitrogen in inorganic fertilizers.

The method is applicable to all fertilizers which do not contain interfering organic compounds.

NOTE Nutrient polymers are methylen-urea (MU), in liquid and in solid form, isobutylidenediurea (IBDU) and crotonylidenediurea (CDU).

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.

EN 1482-1, *Fertilizers and liming materials — Sampling and sample preparation — Part 1: Sampling*

EN 1482-2, *Fertilizers and liming materials — Sampling and sample preparation — Part 2: Sample preparation*

EN 1482-3, *Fertilizers and liming materials — Sampling and sample preparation — Part 3: Sampling of static heaps*

EN 12944-1, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 1: General terms*

EN 12944-2, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 2: Terms relating to fertilizers*

EN 15562, *Inorganic fertilizers — Determination of cyanamide nitrogen*

EN 17864, *Inorganic fertilizers — Determination of nitrogen content in IBDU (isobutylidenediurea) and CDU (crotonylidenediurea)*

ISO 19746:2017, *Determination of urea content in urea-based fertilizers by high performance liquid chromatography (HPLC)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12944-1 and EN 12944-2 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Principle

4.1 General

The test sample is treated in different ways depending on the parameter to be determined.

4.2 Total nitrogen

4.2.1 Total nitrogen in the presence of nitrate nitrogen