



NSAI
Standards

Irish Standard
I.S. EN 15478:2009

Fertilizers - Determination of total nitrogen in urea

I.S. EN 15478:2009

Incorporating amendments/corrigenda issued since publication:

| | | |
|--|--|---|
| <i>This document replaces:</i> I.S. CEN/TS 15478:2006 | <i>This document is based on:</i> EN 15478:2009 CEN/TS 15478:2006 | <i>Published:</i> 21 January, 2009 17 October, 2006 |
| This document was published under the authority of the NSAI and comes into effect on: 27 February, 2009 | | ICS number: 65.080 |
| NSAI 1 Swift Square, Northwood, Santry Dublin 9 | T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie | Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie |
| | | Price Code: F |
| Údarás um Chaighdeáin Náisiúnta na hÉireann | | |

I.S. EN 15478:2009

EUROPEAN STANDARD

EN 15478

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2009

ICS 65.080

Supersedes CEN/TS 15478:2006

English Version

Fertilizers - Determination of total nitrogen in urea

Engrais - Détermination de l'azote total dans l'urée

Düngemittel - Bestimmung von Gesamtstickstoff in
Harnstoff

This European Standard was approved by CEN on 30 November 2008.

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 CEN Management Centre 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 CEN Management Centre has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

| | |
|--|-----------|
| Foreword | 3 |
| 1 Scope | 4 |
| 2 Normative references | 4 |
| 3 Terms and definitions | 4 |
| 4 Principle | 4 |
| 5 Reagents | 4 |
| 6 Apparatus | 5 |
| 7 Sampling and sample preparation | 10 |
| 8 Procedure | 10 |
| 9 Calculation and expression of the result | 11 |
| 10 Precision | 11 |
| 11 Test report | 12 |
| Annex A (informative) Results of the inter-laboratory tests | 13 |
| Bibliography | 14 |

Foreword

This document (EN 15478:2009) has been prepared by Technical Committee CEN/TC 260 “Fertilizers and liming materials”, the secretariat of which is held by DIN.

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 July 2009, and conflicting national standards shall be withdrawn at the latest by July 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 15478:2006.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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

1 Scope

This European Standard specifies a method for the determination of total nitrogen in urea. This method is applied exclusively to urea fertilizers which are nitrate free.

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

EN 12944-1:1999, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 1: General terms*

EN 12944-2:1999, *Fertilizers and liming materials and soil improvers — Vocabulary — Part 2: Terms relating to fertilizers*

EN ISO 3696:1995, *Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12944-1:1999 and EN 12944-2:1999 apply.

4 Principle

Urea is transformed quantitatively into ammonia by boiling in the presence of sulfuric acid. The ammonia thus obtained is distilled from an alkaline medium, the distillate being collected in an excess of standard sulfuric acid. The excess acid is titrated by means of a standard alkaline solution.

5 Reagents

5.1 General

Use only reagents of recognized analytical grade and distilled or demineralized water, free from carbon dioxide and all nitrogenous compounds (grade 3 according to EN ISO 3696:1995).

5.2 Kjeldahl tablets,

5 g/tablet containing 100 parts K_2SO_4 to 1 part selenium.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-