STN P	**Priemyselné hnojivá Stanovenie dusíka nerozpustného v studenej vode a dusíka nerozpustného v horúcej vode v tuhom formaldehyde močoviny a v hnojivách s pomalým uvoľňovaním metylénmočoviny a vo výživových polyméroch vo fosfátovom tlmivom roztoku s pH 7,5 pri 100 °C**	**STN P CEN/TS 17403** 65 4824

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

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/21

Táto predbežná STN je určená na overenie. Pripomienky zasielajte ÚNMS SR najneskôr do 31. 12. 2022.

Obsahuje: CEN/TS 17403:2021

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TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 17403

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ICS 65.080

English Version

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

Engrais - Dosage de l'azote insoluble dans l'eau froide et de l'azote insoluble dans l'eau chaude dans les engrais à libération lente urée-formaldéhyde solides etméthylène-urée, et détermination de la solubilité des polymères nutritifs dans une solution tampon phosphate avec un pH de 7,5 à 100 °C

Düngemittel - Bestimmung von kalt- und heißwasserunlöslichem Stickstoff in festen langsam freisetzenden Harnstoff-Formaldehyd- und Methylenharnstoff-Düngemitteln sowie Bestimmung der Löslichkeit von Nährstoffpolymeren in Phosphatpufferlösung mit einem pH-Wert von 7,5 bei 100 °C

This Technical Specification (CEN/TS) was approved by CEN on 30 November 2020 for provisional application.

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

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Ref. No. CEN/TS 17403:2021 E

Contents

Page

European foreword

This document (CEN/TS 17403:2021) 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

Solid urea formaldehyde and methylene urea slow-release fertilizers are non-coated and chemically synthesized nitrogen fertilizers with slow-release effect. In 1924, the first slow-release fertilizer patent in the world was issued to urea formaldehyde (UF) and in 1955, UF was put into commercial production as the oldest slow-release fertilizer.

WARNING — Users of this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety issues, if any, associated with its use. It is the responsibility of the user to establish appropriate health and safety practices and to ensure compliance with any national regulatory conditions.

IMPORTANT — It is absolutely essential that tests conducted according to this document are carried out by suitably trained staff.

1 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.

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

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*

ISO 5315, *Fertilizers — Determination of total nitrogen content — Titrimetric method after distillation*