

**STN**

**Priemyselné hnojivá. Stanovenie  
N-(n-butyl)triamidu kyseliny fosforečnej (NBPT) a  
N-(n-propyl)triamidu kyseliny fosforečnej (NPPT).  
Metóda vysokoúčinnej kvapalinovej  
chromatografie (HPLC).**

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EN 16651**

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Fertilizers - Determination of N-(n-Butyl)thiophosphoric acid triamide (NBPT) and N-(n-Propyl)thiophosphoric acid triamide (NPPT) - Method using high-performance liquid chromatography (HPLC)

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. 08/15

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2015

Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 16651**

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English Version

**Fertilizers - Determination of N-(n-Butyl)thiophosphoric acid triamide (NBPT) and N-(n-Propyl)thiophosphoric acid triamide (NPPT) - Method using high-performance liquid chromatography (HPLC)**

Engrais - Dosage du N-(n-butyl)triamide de l'acide thiophosphorique (NBPT) et du N-(n-propyl)triamide de l'acide thiophosphorique (NPPT) - Méthode par chromatographie liquide à haute performance (HPLC)

Düngemittel - Bestimmung von N-(n-Butyl)thiophosphorsäuretriamid (NBPT) und N-(n-Propyl)thiophosphorsäuretriamid (NPPT) - Verfahren mit Hochleistungs-Flüssigchromatographie (HPLC)

This European Standard was approved by CEN on 16 April 2015.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## **Foreword**

This document (EN 16651:2015) 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of an identical text or by endorsement, at the latest by November 2015, and conflicting national standards shall be withdrawn at the latest by November 2015.

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## 1 Scope

This European Standard specifies a method for the quantitative determination of the urease inhibitors N-(n-Butyl)thiophosphoric acid triamide (NBPT, CAS-No. 94317-64-3) and N-(n-Propyl)thiophosphoric acid triamide (NPPT, CAS-No. 916809-14-8) content in urea based fertilizers using high-performance liquid chromatography (HPLC).

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, *Water for analytical laboratory use - Specification and test methods (ISO 3696)*

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