



BSI Standards Publication

Fertilizers, soil conditioners and beneficial substances — Determination of EDTA soluble phosphorus content in inorganic fertilizers

National foreword

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The UK participation in its preparation was entrusted to Technical Committee CII/37, Fertilisers and related chemicals.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Fertilizers, soil conditioners and beneficial substances — Determination of EDTA soluble phosphorus content in inorganic fertilizers

*Engrais, amendements et substances bénéfiques — Détermination
de la teneur en phosphore soluble dans l'EDTA dans les engrais
inorganiques*



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Foreword

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Introduction

Owing to the variation of basic phosphate component, character and processing technology, traditionally, different extraction solutions and methods have been utilized for the determination of the phosphorus content of phosphate fertilizers. Extraction solutions currently employed for phosphorus content determination include alkaline ammonium citrate (i.e. Petermann's solution), neutral ammonium citrate, citric acid, ethylene diamine tetraacetic acid (EDTA) and citric acid, or just EDTA. Each of these extractants is designed to target specific phosphate components of phosphorus-based fertilizers.

Due to rapid developments in the modern fertilizer industry, especially with the formulation of compound/complex fertilizers, many phosphate fertilizers may have multiple phosphorus-containing components. The co-existence of these various phosphorus sources in a compound/complex fertilizer can complicate the effective extraction and determination of the phosphorus content.