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Determination of total sulfur in fertilizers by high temperature combustion

Dosage du soufre total dans les engrais par combustion à haute température

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Contents

Page

Foreword

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This document was prepared by Technical Committee ISO/TC 134, *Fertilizers, soil conditioners and beneficial substances*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document was created out of a need for newer and faster laboratory techniques to determine the total sulfur in fertilizer materials. There are numerous documented and validated methods available for determining total sulfur, but they are time-consuming and, in some cases, require the use of hazardous chemicals (e.g. bromine, perchloric acid). These methods also rely on the competency of the chemist/analyst and the laboratory technique is a critical component for producing accurate and reproducible results.

Combustion as an analytical tool has made great strides in recent years and, in some laboratories, this is a commonly used technique. Various detectors have been coupled to a furnace (combustion chamber) and the ensuing gases are measured for the analyte in question.