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Fertilizers and soil conditioners — Water soluble fertilizer — General requirements

Matières fertilisantes — Engrais soluble dans l'eau — Exigences générales

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Foreword

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The committee responsible for this document is ISO/TC 134, *Fertilizers and soil conditioners.*

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Fertilizers and soil conditioners — Water soluble fertilizer — General requirements

1 Scope

This International Standard specifies the requirements for testing methods, sampling and preparation of test sample, marking and labelling, as well as package, transport, and storage of water soluble fertilizers.

This International Standard is applicable to water soluble fertilizers which are completely soluble in water and are suitable for fertigation and sprinkling irrigation, as well as for foliar application (foliar feeding).

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.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

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

ISO 6353-1:1982, *Reagents for chemical analysis — Part 1: General test methods*

ISO 6598, *Fertilizers — Determination of phosphorus content — Quinoline phosphomolybdate gravimetric method*

ISO 7409, *Fertilizers — Marking — Presentation and declarations*

ISO 7410, *Fertilizers and soil conditioners — Final samples — Practical arrangements*

ISO 7742:1988, *Solid fertilizers — Reduction of samples*

ISO 8633, *Solid fertilizers — Simple sampling method for small lots*

ISO 17318, *Fertilizers and soil conditioners — Determination of arsenic, cadmium, chromium, lead and mercury contents*

ISO 17319, *Fertilizers and soil conditioners — Determination of water-soluble potassium content — Potassium tetraphenylborate gravimetric method*

ISO 18643, *Fertilizers and soil conditioners — Determination of biuret content of urea-based fertilizers — HPLC method*

EN 16195, *Fertilizers — Determination of chlorides in the absence of organic material*

CEN/TS 16196, *Fertilizers — Manganimetric determination of extracted calcium following precipitation in the form of oxalate*

EN 16198, *Fertilizers — Determination of magnesium by complexometry*

EN 13366, *Fertilizers — Treatment with a cation exchange resin for the determination of the chelated micro-nutrient content and of the chelated fraction of micro-nutrients*

EN 13368-1, *Fertilizers — Determination of chelating agents in fertilizers by chromatography —Part 1: Determination of EDTA, HEEDTA and DTPA by ion chromatography*

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EN 13368-2, *Fertilizers — Determination of chelating agents in fertilizers by chromatography — Part 2: Determination of Fe chelated by o,o-EDDHA and o,o-EDDHMA by ion pair chromatography*

EN 15451, *Fertilizers — Determination of chelating agents —. Determination of iron chelated by EDDHSA by ion pair chromatography*

EN 15452, *Fertilizers — Determination of chelating agents — Determination of iron chelated by o,p-EDDHA by reversed phase HPLC*

EN 15749, *Fertilizers — Determination of sulfates content using three different methods*

EN 15950, *Fertilizers — Determination of N-(1,2-dicarboxyethyl)-D,L-aspartic acid (Iminodisuccinic acid, IDHA) using high-performance liquid chromatography (HPLC)*

EN 15961, *Fertilizers — Extraction of water-soluble calcium, magnesium, sodium and sulfur in the form of sulfates*

EN 15962, *Fertilizers — Determination of the complexed micro-nutrient content and of the complexed fraction of micro-nutrients*

EN 16109, *Fertilizers — Determination Of complexed micro-nutrient ions in fertilizers — Identification of lignosulfonates*

EN 16847, *Fertilizers — Determination of complexing agents in fertilizers — Identification of heptagluconic acid by chromatography*

EC Regulation No. 2003/2003

3 Requirement

3.1 Appearance: the product (including single fertilizers, complexed micronutrients, and/or products obtained chemically) is a mixture of powders, prills, and/or granules free of foreign matter.

3.2 Water soluble fertilizer products shall be tested to demonstrate the conformance with the requirements specified in Table 1, when applicable, and the values declared on containers.

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