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Fertilizers and soil conditioners — Sulfur Coated Urea (SCU) — General requirements

Matières fertilisantes — Urée enrobée de soufre (SCU) — Exigences générales

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

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

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Introduction

Sulfur Coated Urea (SCU) is a coated slow release fertilizer consisting of urea particles coated with sulfur, which was first developed by the Tennessee Valley Authority's National Fertilizer Development Center (TVA/NFDC), Alabama in 1961, and produced commercially in 1967. SCU is made by coating urea with sulfur and sealant. The main coating material of SCU is sulfur. Sulfur is insoluble in water and its chemical properties are stable, thus it is an impermeable coating material. In addition, sulfur itself is a secondary nutrient and it does not pollute the soil when applied appropriately.

This International Standard specifies general requirements, sampling, and preparation of test sample, marking and labelling, packaging, transport, and storage for SCU.

NOTE Some countries or regions might have published other standards covering requirements for SCU.

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Fertilizers and soil conditioners — Sulfur Coated Urea (SCU) — General requirements

1 Scope

This International Standard specifies general requirements, sampling and preparation of test sample, marking and labelling, packaging, transport, and storage for SCU.

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 7409, *Fertilizers — Marking — Presentation and declarations*

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

ISO 7742, *Solid fertilizers — Reduction of samples*

ISO 8157, *Fertilizers and soil conditioners — Vocabulary*

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

ISO 17322, *Fertilizers and soil conditioners —Analytical Methods for SCU*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
sulfur coated urea
SCU
coated controlled release fertilizer consisting of urea particles coated with sulfur

Note 1 to entry: The product is usually further coated with a sealant and, if necessary, a conditioner to avoid tackiness from the sealant.

[SOURCE: ISO 8157, 2.2.1.12]

3.2
slow-release fertilizers
fertilizer, of which, by hydrolysis and/or by biodegradation and/or by limited solubility, the nutrients available to plants is spread over a period of time, when compared to a “reference soluble ” product, e.g. ammonium sulfate, ammonium nitrate, and urea

[SOURCE: ISO 8157, 2.1.11]

3.3
controlled-release fertilizers
fertilizer in which nutrient release is controlled, meeting the stated release rate of nutrient and the stated release time at a specified temperature

Note 1 to entry: Typical examples are coated fertilizers.

[SOURCE: ISO 8157, 2.1.12]

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