AFDC 10 (447) DTZS/ISO 19747:2020

DRAFT TANZANIA STANDARDS

Fertilizers and soil conditioners — Determination of monosilicic acid concentrations in nonliquid fertilizer materials

TANZANIA BUREAU OF STANDARDS

NATIONAL FOREWORD

The Tanzania Bureau of Standards is a statutory national standards body for Tanzania, established under the Act.No.3 of 1975, amended by Act.No.2 of 2009.

This Tanzania standard is being prepared by Fertilizer and soil conditions Technical Committee, under the supervision of Agriculture and Food Standards Divisional Committee (AFDC).

This Tanzania standard is identical adoption of ISO 19747:2020 Fertilizers and soil conditioners — Determination of monosilicic acid concentrations in nonliquid fertilizer materials published by the Technical Committee ISO/TC 134 of International Organization for Standardization.

TERMINOLOGY AND CONVENTIONS.

The text of international standard is hereby being recommended for approval without deviation for publication as Tanzania standard.

Some terminologies and certain conventions are not identical with those used in Tanzania standards: attention is drawn especially to the following: -

1) The comma has been used as decimal marker for Metric dimensions. In Tanzania standards, it's currently practice to use "full point" on the baseline as decimal marker.

2) Where the words "International Standard(s)" appear, referring to this standard they should read "Tanzania Standard(s)".

SCOPE

This document establishes a method for the determination of monosilicic acid concentrations in nonliquid fertilizer materials. Monosilicic acid is reported as silicon (Si).

This extraction method is applicable to the detection of monosilicic acid in nonliquid fertilizer products, blended products, and beneficial substances at silicon (Si) concentrations of 2 to 84 g/kg, with a limit of detection (LOD) of 0,6 g/kg Si, and a limit of quantification (LOQ) of 2 g/kg correlating well with plant uptake.

This method is not applicable to liquid silicon fertilizer sources due to an expected low bias of Si recovery and low correlation with plant uptake.