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DRAFT TANZANIA STANDARDS

Liming material — Determination of neutralizing value— Titrimetric methods

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 General Sampling and Test Methods Technical Committee, under the supervision of Agriculture and Food Standards Divisional Committee (AFDC).

This Tanzania standard is identical adoption of ISO 20978:2020 Liming material — Determination of neutralizing value— Titrimetric methods 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 specifies two methods for the determination of the neutralizing value (NV) of liming materials.

Method A is applicable to all liming materials except silicate liming materials.

NOTE 1 Examples of hard liming materials are limestone and dolomite. Examples of soft liming materials are chalk, marl and burnt lime.

Method B is applicable to all liming materials.

Neither method correctly takes into account the potential neutralizing value of material containing more than 3 % P_2O_5. For a more accurate agronomic assessment of products containing more than 3 % P_2O_5, EN 14984[8] is used to determine the liming efficiency.

NOTE 2 The methods described in ISO 6598 and ISO 7497 can be used for the determination of P_2O_5 content. Further information on P analyses is given in References [5] and [6].

NOTE 3 Carbonate consumes H^+ and removes acidity in solution with subsequent dissociation to H_2O and CO_2. Forms of orthophosphate can consume H^+ but are not dissociated to molecular forms that remove acidity. The acidity is back titrated with alkali causing an underestimation of NV.