



DRAFT TANZANIA STANDARDS

Water quality — Radium 226 and Radium 228 — Test method using liquid scintillation counting.

TANZANIA BUREAU OF STANDARDS

0. National foreword

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

This draft Tanzania standard is being prepared by noise and vibrations Technical Committee, under the supervision of the Environmental Management Divisional Standards Committee (EMDC).

This draft Tanzania Standard is identical to, ***ISO 22908, Water quality — Radium 226 and Radium 228 — Test method using liquid scintillation counting***, published by the International Organization for Standardization (ISO).

1. Terminology and conventions

The text of the International Standard is hereby being recommended for approval without deviation for publication as draft Tanzania standard. Some terminology and certain conversion are not identical with those used in Tanzania Standards; attention is drawn to the following:

The comma (,) has been used as decimal marker for metric dimensions. In Tanzania, it is current practice to use a full point (.) on the baseline as a decimal marker.

Wherever the words “International Standard” appear, referring to this draft standard, they should read as “Tanzania Standard”.

2. Scope

This document specifies the determination of radium-226 (²²⁶Ra) and radium-228 (²²⁸Ra) activity concentrations in drinking water samples by chemical separation of radium and its measurement using liquid scintillation counting.

Massic activity concentrations of ²²⁶Ra and ²²⁸Ra which can be measured by this test method utilizing currently available liquid scintillation counters go down to 0,01 Bq/kg for ²²⁶Ra and 0,06 Bq/kg for ²²⁸Ra for a 0,5 kg sample mass and a 1 h counting time in a low background liquid scintillation counter.

The test method can be used for the fast detection of contamination of drinking water by radium in emergency situations.