



EMDC 2(162) DTZS  
/ISO 19087:2018

## DRAFT TANZANIA STANDARD

---

Workplace air- Analysis of respirable crystalline silica by Fourier- Transform  
Infrared Spectroscopy

---

# DRAFT TANZANIA STANDARD

---

## 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 finalized Tanzania standard is being prepared by Air Quality Technical Committee, under the supervision of the Environmental Management Divisional Standards Committee (EMDC)

This finalized Tanzania Standard is identical to ISO 19087:2018 - Workplace air- Analysis of respirable crystalline silica by Fourier- Transform Infrared Spectroscopy, published by the International Organization for Standardization (ISO).

## 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".

## 1. SCOPE

This document is a standard for the analysis by Fourier-Transform Infrared (FTIR) of respirable crystalline silica (RCS) in samples of air collected on collection substrates (i.e. filters or foams). Three analytical approaches are described for whom the dust from the sample collection substrate is

- a) analyzed directly on sampled filter,
- b) recovered, treated and deposited onto another filter for analysis, or
- c) recovered, treated and pressed into a potassium bromide (KBr) pellet for analysis.

This document provides information on the instrumental parameters, the sensitivity of different sampling apparatus, the use of different filters and sample treatment to remove interference. In this document the expression RCS includes the most common polymorphs quartz and cristobalite.