



**DRAFT TANZANIA STANDARD**

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**Petroleum products - Determination of alkyl nitrate in diesel fuels -  
Spectrometric method**

**TANZANIA BUREAU OF STANDARDS**

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## 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 adopted by Petroleum and petroleum products Technical Committee under the supervision of the Chemicals Divisional Standards Committee.

This draft Tanzania Standard is the identical adoption of ISO 13759:1996 Petroleum products - Determination of alkyl nitrate in diesel fuels - Spectrometric method

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

## Terminology and conventions

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

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

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

## Scope

This International Standard specifies a procedure for the determination of alkyl nitrate in diesel fuel in the concentration range 0,03 % (V/V) to 0,30 % (V/V) (volume fraction 0,03 % to 0,30 %).

A knowledge of the specific alkyl nitrate present in the diesel fuel is required for accurate determinations, as the calibration of instrumentation is reliant on reference solutions containing the nitrate to be analysed. When the specific alkyl nitrate is not known, a result comparative to a reference alkyl nitrate (4.2) gives indicative information.

NOTE — The addition of certain alkyl nitrates to diesel fuel enhances the cetane number as measured by the engine test described in ISO 5165. It has no effect on the cetane index value as described in ISO 4264. See annex A.

The presence of nitrate esters, inorganic nitrate ions and nitrogen oxides will interfere with this determination.