



DRAFT TANZANIA STANDARD

**Petroleum products — Determination of sulfur content — Energy -
dispersive X-ray fluorescence spectrometry**

TANZANIA BUREAU OF STANDARDS

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 8754:2003 Petroleum products — Determination of sulfur content — Energy -dispersive X-ray fluorescence spectrometry

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 method for the determination of the sulfur content of petroleum products, such as naphthas, unleaded motor gasolines, middle distillates, residual fuel oils, base lubricating oils and components. The method is applicable to products having sulfur contents in the range 0,03 % (m/m) to 5,00 % (m/m). NOTE For the purposes of this International Standard, the term “% (m/m)” is used to represent the mass fraction of a material. Heavy metal additives, such as lead alkyls, may interfere with the determination. Elements such as silicon, phosphorus, calcium, oxygen, potassium, zinc, molybdenum, barium and halogens interfere, if present in concentrations of more than a few hundred milligrams per kilogram. Some modern instruments allow the analyst to compensate for matrix and spectral interferences by spectra deconvolution and inter-element correction by multiple regression. For samples varying in composition of aromatic hydrocarbons and paraffinic hydrocarbons, the ratio of carbon to hydrocarbon in a sample (C/H ratio) may also interfere with the determination, when the ratio of the sample differs by one or more from that of the reference materials from which the calibration is obtained