

APPROVED
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Neutral spirit — Specification

KS EAS 144: 2014

TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Ministry of Health — Public Health Department
Government Chemist's Department
London Distillers Ltd.
(UDV) Kenya Ltd.
Kenya Wine Agencies Ltd.
East African Breweries Ltd.
Keroche Industries Ltd.
Africa Spirits Ltd.
Institute of Packaging, Kenya
Spectre International Ltd.
Agro-Chemical (K) Ltd.
National Campaign against Drug Abuse (NACADA)
Consumer Information Network
Weight and Measures Department
Kenya Revenue Authority
Kenya Bureau of Standards — Secretariat

REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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Neutral spirit — Specification

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KS EAS 144: 2014

NATIONAL FOREWORD

This Kenya Standard was prepared by the Alcoholic Beverages Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards.

This standard is identical with and has been reproduced from EAS 144, Neutral spirit— Specification, published by the East African Community (EAC). The National Standards Council has endorsed the adoption of the 2014 edition of this standard as a Kenya Standard.

For the purposes of this standard, the text of the East African Standard should be modified as follows:

a) Terminology

The words 'this Kenya Standard' should replace the words 'this East African Standard', wherever they appear.

b) References

The references to East African Standards should be replaced by references to the appropriate Kenya Standards, where they have been declared.



EAS 144: 2014

ICS 67.160.10

EAST AFRICAN STANDARD

Neutral spirit — Specification

EAST AFRICAN COMMUNITY

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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

EAS 144 was prepared by Technical Committee EASC/TC 007, *Alcoholic and non-alcoholic beverages*.

This second edition cancels and replaces the first edition EAS 144:2000, of which has been technically revised.

Neutral spirit — Specification

1 Scope

This East African Standard specifies the requirements and method of sampling and test for neutral spirit intended for use in the manufacture or blending of alcoholic beverages.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EAS 12, *Drinking (potable) water — Specification*

EAS 38, *Labelling of pre-packaged foods — Specification*

EAS 39, *Hygiene in food and drink manufacturing industry — Code of practice*

EAS 100, *Food stuffs — Methods of determination of Lead*

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply.

3.1

alcohol

as ethyl alcohol (C₂H₅OH)

3.2

furfural

aldehyde with the chemical formula C₄H₃OCHO, is one of the by products of alcohol fermentation of carbohydrate material by microorganism present

3.3

fusel oil

complex mixture of higher alcohols containing principally amyl alcohols (pentanols), butyl alcohols (butanols), propyl alcohols (propanols) and traces of capryl alcohol (octan-2-ol), hexyl alcohols (hexanols), or heptyl alcohols (heptanols), esters, aldehydes and terpenes. It is a product of alcoholic fermentation obtained during distillation

3.4

neutral spirit

distillate obtained from fermented carbohydrate material, purified by fractional distillation with complete removal of fusel oil and furfural

4 Requirements

4.1 General requirements

Neutral spirit shall:

- a) be derived from carbohydrate materials of agricultural source;
- b) be clear, colourless and free from any suspended matter even when diluted to 20 % by volume with distilled water;
- c) have only the odour of pure ethyl alcohol and no secondary odour; and
- d) have only the characteristic taste of pure ethyl alcohol.

4.2 Specific quality requirements

Neutral spirit shall comply with the quality requirements specified in Table 1.

Table 1 — Quality requirements for neutral spirit

SI No	Characteristic	Requirement	Test method
i)	Specific gravity at 20 °C, max.	0.80829	EAS 104
ii)	Ethanol content, percent by volume at 20 °C, min.	96	
iii)	Miscibility with water, percent	100	
iv)	Alkalinity,	To pass the test	
v)	Volatile acids as acetic acid, mg/L absolute alcohol, max.	20	
vi)	Total solids, % mg/L, max.	30	
vii)	Methanol content, mg/L, max.	50	
viii)	Higher alcohols (fusel oils) as amyl alcohol, mg/L of absolute alcohol, max.	30	
ix)	Furfural content	To pass the test	
x)	Aldehydes (as acetaldehyde), mg/ L, max.	5	
xi)	Permanganate reaction time, in minutes, min.	30	

5 Heavy metal contaminants

When tested in accordance with EAS 100, the level of lead shall not exceed 0.01 mg/L.

6 Hygiene

Neutral spirit shall be manufactured and handled in a hygienic manner in accordance with EAS 39.

7 Weights and measures

The volume and fill of neutral spirit shall comply with the weights and measures regulations of Partner States or equivalent legislation.

8 Packaging

8.1 Neutral spirit shall be packaged in suitable food grade containers.

8.2 Neutral spirit shall be packaged for bulk delivery and storage in containers that shall prevent contamination of the product and preserve its safety and quality.

9 Labelling

The containers in which neutral spirit is packaged for storage or transport shall be marked in accordance with the provisions of EAS 38.

Markings indicative of the inflammable nature of the material shall be clearly displayed on such containers.

10 Sampling and test

Sampling and testing of neutral spirit shall be done in accordance with EAS 104.

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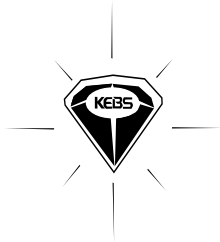
KEBS CERTIFICATION MARKS

1. Product Certification Marks



KEBS Standardization Mark (S-Mark) is issued for use on products that comply with the minimum quality requirements prescribed in Kenya standards. It uses standards as a benchmark for quality compliance and aims at giving manufacturers improved market access and also giving consumers an assurance of quality for the products bearing the mark.

Standardization Mark
SYMBOL FOR PRODUCT QUALITY



Diamond Mark of Quality
SYMBOL FOR PRODUCT QUALITY EXCELLENCE



Import Standardization Mark
SYMBOL FOR PRODUCT QUALITY

2. Systems Certification Marks



ISO 9001 REGISTERED FIRM
QUALITY MANAGEMENT SYSTEM



OCCUPATIONAL HEALTH AND SAFETY
OHSAS 18001 CERTIFIED



ISO 14001 REGISTERED FIRM
ENVIRONMENTAL MANAGEMENT SYSTEM



ISO 22000 REGISTERED FIRM
FOOD & SAFETY MANAGEMENT SYSTEM

KEBS is mandated to provide Standardization, Metrology and Conformity Assessment Services through:

- Promotion of standardization in commerce and industry
- Provision of testing and calibration facilities
- Control of the use of standardization marks
- Undertaking educational work in standardization
- Facilitation of the implementation and practical application of standards
- Maintenance and dissemination of the International System of Units (SI) of measurements

KEBS offers the following services:

- Standards development and harmonization
- Testing services
- Measurement services (Calibration)
- Enforcement of standards
- Product inspection services
- Education and Training in Standardization, Metrology and Conformity Assessment
- Product and Management Systems Certification Services

INFORMATION ON STANDARDS

Standards are documents that provide a common reference point for the assessment of the quality of goods and services. Standards facilitate transparency in the exchange of products and enhance market access of Kenyan products into local, regional and international markets.

Information on standards and related documents is available at the KEBS standards information centre.

KEBS houses the WTO-TBT National Enquiry Point (NEP) which disseminates notification likely to affect international trade to the industry.

KEBS also provides technical advice on installation and improvement of quality goods and services to the industry so as to facilitate efficient implementation of standards. Some of the advantages of standards include: enhancement of quality assurance, safety and environmental protection measures, minimization of wastage, reduction of costs and unnecessary varieties and promotion of interchangeability and increased productivity in industry.

For further information please contact

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