



DEAS 63:2013
ICS 67.160.10

DRAFT EAST AFRICAN STANDARD

Beer — Specification

EAST AFRICAN COMMUNITY

Foreword

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

In order to achieve this objective, the Partner States in the Community through their National Bureaux of Standards, have established an East African Standards Committee.

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.

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Beer — Specification

1 Scope

This draft East African Standard prescribes the requirements and methods of sampling and test for locally manufactured and imported beer.

2 Normative references

EAS 12, *East African Standard specification for drinking waters.*

EAS 38, *East African Standard specification for the labelling of pre-packaged foods.*

EAS 39, *Code of practice for hygiene for food and drink industries.*

EAS 103:1999, Schedule for permitted food additives

EAS 124:1999, Rounding off number values

3 Definitions

For the purpose of this standard the following definitions shall apply:

3.1

alcohol

ethyl alcohol (C₂H₅OH)

3.2

Beer

is a beverage, containing ethyl alcohol prepared by alcoholic fermentation of sugars derived mainly from malted and/or un malted cereal grains and/or approved adjuncts.

3.3

Malt

cereal grain (often barley), which has been steeped, allowed to germinate and then dried or kilned to halt further germination.

3.4

unmalted cereal grains

are cereal grains that have not undergone the processes in clause 3.3.

3.5

Brewing

the process of converting malt and/or un malted cereal grains and adjuncts into beer.

3.6

adjuncts

— Any other source of fermentable sugar from an agricultural origin other than malted barley

NOTE These materials are usually but not exclusively added in the brew house during the process of brewing

3.7

potable water

complying with the requirements of EAS 12

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3.9

food additive

any substance not normally consumed as food by itself and not normally used as a typical ingredient of food, whether or not it has nutritive value, the intentional addition of which to food for a technological (including organoleptic) purpose in the manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food results, or may be reasonably expected to result, (directly or indirectly) in it or its by-products becoming a component of or otherwise affecting the characteristics of such foods. The term does not include 'contaminants' or substances added to food for maintaining or improving nutritional qualities.

3.10

contaminant

any substance not intentionally added to food, which is present in such food as a result of the production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine) manufacture, processing, preparation, treatment, packing, transport or holding of such food or as a result of environmental contamination. The term does not include insect fragments, rodent hair and other extraneous matter.

3.11

extraneous matter

include inorganic matter such as sand, glass, metal, gravel, dirt, pebbles, stones, lumps of earth, clay and mud and organic matter such as chaff, straw, weed seeds and grains of crops, insects or insects fragments, rodent hairs or any other foreign matter. Extraneous matter does not include substances produced by interaction of normal beer ingredients as a result of natural ageing process such as polyphenols- protein interactions

4 Classification of beer

Beer shall be classified into one of the following classes:

- 4.1 **Non-alcohol beer:** Containing less than 0.5 % ethyl alcohol by volume
- 4.2 **Low alcohol/light beer:** 0.5-2.4% ethyl alcohol by volume
- 4.3 **Mild beer:** Containing 2.5 % - 4.0 % alcohol by volume.
- 4.4 **Medium beer:** Containing 4.1 % - 5.5 % alcohol by volume.
- 4.5 **Strong beer:** Containing more than 5.5% alcohol by volume.

5 Requirements for beer

5.1 Ingredients

5.1.1 Essential ingredients

The following ingredients complying with the relevant East African Standards, shall be used for the production of beer:

- i) Malted and or unmalted grains;
- ii) Hops and products derived from hops; and
- iii) Potable water.

5.1.2 Optional ingredients or adjuncts

Unmalted cereal grains (see clause 3.4) and adjuncts (see Clause 3.6)

5.2 Food additives

Food additives, where used, shall be in accordance to EAS 103

5.3 Processing aids

Only food grade processing aids generally recognized as safe for human consumption shall be used during the manufacture of products covered by this standard.

5.4 General Requirements

5.4.1 Beer shall be free from:

- a) Any substances injurious to health;
- b) Any extraneous matter;
- c) Artificial sweetening agents;
- d) Any artificial colorants except for those colouring agents prepared from sugar, barley, malt or any cereal grains; and
- e) Any added alcohol.

5.4.2 Bright lager beer shall have maximum haze of 2.5 EBC units and cloudy beer shall be stable with a pH of 3.5-4.75

5.5 Microbiological requirements

Products covered by this standard shall be:

- a) Hygienically produced as stipulated in the East African Standard Code of practice for hygiene for food and drink industries (EAS 39) and in the Public Health Act.
- b) Processed and or effectively treated in a manner which renders them microbiologically stable and free from coliforms or pathogenic micro-organisms and shall comply with the requirements stipulated in the Table 1.
- c) Free from substances originating from micro organisms in amounts that may be toxic.

Table 1 — Microbiological requirements for beer

Micro-organism	Requirement
(i) Acetic acid bacteria in 100 ml	Shall be absent
(ii) Lactic acid bacteria in 100 ml	Shall be absent
(iii) Hydrogen Sulphide producing bacteria in 100 ml	Shall be absent
(iv)	
(v) Wild yeast in 100 ml	Shall be absent

5.6 Metal contaminants

The maximum limits in mg/L for trace elements in the product shall comply with the requirements in Table 2

Table 2 — Limits of heavy metal contaminants in beer

S.No	Contaminant, mg/l	Maximum limit
1	Arsenic, As	0.01
4	Tin, Sn	150
5	Lead, Pb	0.1

6 Weights and measures

6.1 Volume of the contents

The volume of filled beer shall comply with regulations of the weights and Measures Acts of the community.

6.2 Fill of container

The container shall be well filled with the product. When packed in rigid containers, the product shall occupy not less than 90 % of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20 °C which the sealed container will hold when completely filled.

7 Packaging

7.1 Beer shall be packaged in suitable food grade containers

8 Labeling

Labelling of beer shall be done in accordance with the requirements of EAS 38 and shall include the following in each consumer unit:

- i) Common and brand name of beer;
- ii) Name, physical location and address of manufacturer;
- iii) Ethyl alcohol content, % by volume;
- class of beer iv) List of ingredients in descending order of proportion by mass;
- v) Net contents in accordance with the weights and measures requirements;
- vi) A declaration by common name of any additives used;
- vii) Date of manufacture, batch identification number/code;
- viii) best before
- ix) Country of origin.
- xi) Statutory warnings

9 Sampling and test methods

Sampling and test of beer shall be done in accordance with respective clause of EAS 104 and as specified in relevant clauses

