

ICS 67.160.10

DMS 208:2021
Third edition

DRAFT MALAWI STANDARD

Opaque beer – Specification

NOTE – This is a draft proposal and shall neither be used nor regarded as a Malawi standard

Opaque beer – Specification

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Price based on 3 pages

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FOREWORD

This draft Malawi standard was prepared by MBS/TC 11, the Technical Committee on *Alcoholic and non-alcoholic beverages* to provide requirements for opaque beer. It is the second revision of MS 208, *Opaque beer – Specification*.

In preparing this draft Malawi standard reference was made to the following standard:

East African Standard, EAS 61:2014, *Opaque beer – Specification*; and

South African National Standard, SANS 183:2011, *the production of sorghum beer*.

Acknowledgement is made for the use of the above standard.

TECHNICAL COMMITTEE

This draft Malawi standard was prepared by MBS/TC 11, the Technical Committee on *Alcoholic and non-alcoholic beverages*, and the following companies, organizations and institutions were represented:

Castel Malawi Brewery Limited;

Chibuku Products Limited;

Competition and Fair Trading Commission;

Consumer Association of Malawi;

Environmental Affairs Department;

Immortals Limited;

Lilongwe Dairy (2001) Limited;

Malawi Environment Protection Authority;

Malawi Revenue Authority;

Malawi University of Business and Applied Sciences;

Ministry of Health;

Ministry of Local Government;

Ministry of Trade and Industry;

Rab Processors Limited;

Shoprite Limited;

Universal Industries Limited; and

University of Malawi.

NOTICE

This draft standard shall be reviewed every five years, or earlier whenever it is necessary, in order to keep abreast of progress. Comments are welcome and shall be considered when the standard is being reviewed.

DRAFT MALAWI STANDARD

Opaque beer – Specification

1 SCOPE

This draft Malawi standard specifies the requirements, method of sampling and test for opaque beer.

2 NORMATIVE REFERENCES

The following standards contain provisions, which through reference in this text, constitute provisions of this Malawi standard. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this standard are encouraged to take steps to ensure the use of the most recent edition of the standards indicated below. Information on current valid national and international standards can be obtained from the Malawi Bureau of Standards.

MS 19: *Labelling of prepacked foods – General standard;*

MS 21: *Food and food processing units – Code of hygienic conditions;*

MS 237: *Food additives – General standard;*

MS 302: *Contaminants and toxins in food – General standard;*

MS 411: *Opaque beer – Methods of sampling and test;*

ISO 4832: *Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coliforms – Colony-count technique;*

ISO 4833: *Microbiology of the food chain – Horizontal method for the enumeration of microorganisms – Part 1: Colony count at 30 °C by the pour plate technique;*

ISO 6579: *Microbiology of food and animal feeding stuffs – Horizontal method for the detection of Salmonella spp;*

ISO 7251: *Microbiology of food and animal feeding stuffs – Horizontal method for the detection and enumeration of presumptive Escherichia coli – Most probable number technique; and*

ISO 16050: *Foodstuffs – Determination of aflatoxin B₁, and the total content of aflatoxin B₁, B₂, G₁ and G₂ in cereals, nuts and derived products – High performance liquid chromatographic method.*

3 TERMS AND DEFINITIONS

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

3.1**extraneous matter**

includes 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

3.2**opaque beer**

product derived from the fermentation of a mash of cereal grain, and/or other products of plant origin, with or without honey, sugar or a mixture of any of these; containing the mash or the residual mash from which it is derived

4 ESSENTIAL COMPOSITION AND QUALITY FACTORS

4.1 General requirements

Opaque beer shall:

4.1.1 Be free from extraneous matter;

4.1.2 Be free from any substances deleterious to health; and

4.1.3 Have the characteristic appearance, taste and aroma of their type.

4.2 Specific requirements

Opaque beer shall conform to the compositional requirements in **Table 1**.

Table 1 – Compositional requirements for opaque beer

S/N	Characteristic	Requirement	Test methods
1	pH	2.5 – 5.0	MS 411
2	Total acidity as tartaric acid, g/100 L, max.	0.55	
3	Lactic acid, g/100 L, max.	0.6	
4	Ethyl alcohol content, %, v/v	1.5 – 8.0	
5	Total solids, %, m/v.	3.0 – 9.0	
6	Soluble solids content, %, m/v	3.0 – 6.0	
7	Specific gravity at 20 °C	1.005 – 1.045	

4.2.5 Opaque beer shall comply with limits for microorganisms specified in **Table 2**.

Table 2 – Microbiological limits for opaque beer

1	2	3	4
S/N	Characteristic	Maximum limit	Test methods
1	Coliforms, cfu/ml	Absent	ISO 4832
2	Total plate count, cfu/ml	10 ²	ISO 4833-1
3	<i>E. coli</i> , per 100 ml	Absent	ISO 7251
4	<i>Salmonella spp.</i> per 25 ml	absent	ISO 6579

5 FOOD ADDITIVES

Only those food additives listed under this product in MS 237, may be used and only within the limits specified.

6 CONTAMINANTS

6.1 Heavy metals

The products covered by this standard shall comply with the maximum levels of heavy metals and toxic substances prescribed in MS 302.

6.2 Pesticide residues

All the raw materials used in the production of opaque beer shall comply with the maximum residue limits for pesticides as established by the Codex Alimentarius Commission.

6.3 Aflatoxin limits

Total aflatoxin shall not exceed 10 µg/L and aflatoxin B1 shall not exceed 5 µg/L when tested in accordance with ISO 16050.

7 HYGIENE

The product covered by the provisions of this draft standard shall be prepared and handled in accordance with the requirements set out in MS 21.

8 PACKAGING AND LABELLING

8.1 Packaging

8.1.1 Opaque beer shall be packaged in suitable food grade containers.

8.1.2 Opaque beer shall be packaged for bulk delivery and storage in containers that shall prevent contamination of the product and preserve its safety and quality.

8.2 Labelling

In addition to provisions prescribed in MS 19, the following information shall be marked or labelled indelibly and legibly on the opaque beer packages:

8.2.1 Name of the product;

8.2.2 Name, physical location and address of manufacturer, packer, distributor, importer, exporter or vendor of the product;

8.2.3 List of ingredients in descending order of proportion by mass;

8.2.4 Net contents in volume;

8.2.5 Best before date;

8.2.6 Date of manufacture;

8.2.7 Storage instruction;

8.2.8 A statement "Sale to and consumption by persons under 18 years of age is prohibited" or use relevant symbols e.g. +18 years to represent the statement; and

8.2.9 Batch identification number/code.

9 SAMPLING AND METHODS OF TEST

The products covered by the provisions of this standard shall be sampled and tested using appropriate standard methods declared in this standard.

THE MALAWI BUREAU OF STANDARDS

The Malawi Bureau of Standards is the standardizing body in Malawi under the aegis of the Ministry of Trade and Industry. Set up in 1972 by the Malawi Bureau of Standards Act (Cap: 51:02), the Bureau is a parastatal body whose activities aim at formulating and promoting the general adoption of standards relating to structures, commodities, materials, practices, operations and from time to time revise, alter and amend the same to incorporate advanced technology.

CERTIFICATION MARK SCHEME

To bring the advantages of standardization within the reach of the common consumer, the Bureau operates a Certification Mark Scheme. Under this scheme, manufacturers who produce goods that conform to national standards are granted permits to use the Bureau's "Mark of Quality" depicted below on their products. This Mark gives confidence to the consumer of the commodity's reliability.

