ICS 67.160.10	DMS 1389:2016 First edition
DRAFT MALAWI	STANDARD

# **Sparkling wine – Specification**

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

ICS 67.160.10 DMS 1389:2016

# Sparkling wine - Specification

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#### **FOREWORD**

This draft proposal has been prepared by MBS/TC 11, the Technical Committee on *Beverages* to provide requirements for sparkling wine.

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

East African Standard, EAS 140:2014, Sparkling wine - Specification.

Acknowledgement is made for the use of the information.

#### **TECHNICAL COMMITTEE**

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

Blantyre Hotels Limited;

Blantyre Water Board;

Carlsberg (Malawi) Limited;

Chibuku Products Limited;

Consumers Association of Malawi;

Dairibord Malawi Limited;

Linga Fine Foods and Winery;

Malawi Bureau of Standards;

Mkombezi Wine Cooperatives;

Peoples Trading Centre; and

The Malawi Polytechnic (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

# Sparkling wine - Specification

#### 1 SCOPE

This draft Malawi standard specifies requirements and methods of sampling and test for sparkling wine.

#### 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 standard 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 107: Alcoholic beverages - Methods of test;

MS 237: Food additives – General standard;

MS 302: Contaminants and toxins in foods - General standard:

AOAC Official Method 925.35: Determination of sucrose in fruits and fruit products;

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

ISO 4833-1: Microbiology of the food chain – Horizontal method for the enumeration of micro-organisms – Part 1: Colony-count at 30 °C – Pour plate technique; and

ISO 5519: Fruits, vegetables and derived products – Determination of sorbic acid content.

#### 3 TERMS AND DEFINITIONS

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

# 3.1

#### drv wine

wine in which practically all the sugar has been converted by fermentation into alcohol

#### 3.2

#### 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 fruit matter, insects or insects fragments, rodent hairs or any other foreign matter

#### 3.3

#### medium sweet wine

wine which contains unfermented sugar in a range of 4 to 45 g/l as sucrose

#### 3.4

#### red wine

wine obtained from fruit juice, usually grapes in which the skins, and stems are present during fermentation in order to impart the red colouration arising from anthocyanin pigments extracted by the alcohol being produced

#### 3.5

#### rose wine

wine produced by the normal alcoholic fermentation fruits juice, usually grapes, in which the colouring matter of skins and stems are removed before fermentation, yet retaining the pink colouration

#### 3.6

# sparkling wine

product obtained by alcoholic re-fermentation of grapes or other fruits and shall contain a visible excess of carbon dioxide derived from fermentation, or carbonation process

#### 3.7

#### sweet wine

wine which contains some unfermented sugar

#### 3.8

#### white wine

wine produced by the normal alcoholic fermentation of fruit juice, usually grapes without the pigment extraction

#### 4 ESSENTIAL COMPOSITION AND QUALITY FACTORS

# 4.1 General requirements

- **4.1.1** Sparkling wine shall possess the characteristic taste and aroma associated with the type of wine.
- **4.1.2** Sparkling wine shall be free from cloudiness and suspended/particulate matter.
- **4.1.3** Sparkling wine shall be so produced as to prevent spoilage under normal storage conditions.
- **4.1.4** Sparkling wine shall be free from any extraneous matter.
- 4.1.5 Sparkling wine shall have typical organoleptic characteristics of their raw materials.
- 4.1.6 Sparkling wine shall have no artificial colour added to give or amplify the colour.

# 4.2 Specific quality requirements

Sparkling wine shall comply with the quality requirements of Table 1.

Table 1 – Requirements for sparkling wine

S/N	Characteristic	Requirement	Test method	
1	Ethyl alcohol content, %	7 –16.5		
2	Total solids, g/l	40 – 150	MS 107	
3	Total acids, as tartaric acid, g/l	4.0 – 10	0 107	
4	Volatile acids, as acetic acid, g/l, max.	1.0		
5	Total sugar, as sucrose, g/l			
	Dry wine	< 4		
	Medium sweet wine	4 – 45	AOAC	
	Sweet wine	> 45		
6	рН	3.0 - 4.0		
7	Atmospheric carbon dioxide at 20 °C	3.0 - 7.0	MS 107	
8	Sorbic acid, mg/kg, max.	1000	1000 ISO 5519	
9	Free sulfur dioxide, mg/kg, max.	50	MC 107	
10	Total sulfur dioxide, mg/kg, max.	250	- MS 107	

#### 4.3 Microbiological limits

Sparkling wine shall comply with limits for micro-organisms specified in Table 2.

Table 2 – Microbiological limits for sparkling wine

1	2	3	4
S/N	Organism	Limit	Test method
1	Coliforms, cfu/ml	Nil	ISO 4832
2	Total plate count, cfu/ml, max.	100	ISO 4833-1

#### 5 FOOD ADDITIVES

Food additives may be used in the production of sparkling wine in accordance with MS 237.

#### 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

Sparkling wine shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this product.

### 7 HYGIENE

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

### 8 PACKAGING AND LABELLING

# 8.1 Packaging

Sparkling wine shall be packaged in suitable food grade containers. Sparkling wine 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 the requirements of MS 19, the following specific provisions shall apply:

- a) common name as 'sparkling wine' preceded by the fruit name where the wine is produced from other fruit other than grape;
- b) name, physical location and address of manufacturer;
- c) ethyl alcohol content, % by volume;
- d) the net contents shall be declared by volume in millilitres or litres;
- e) list of ingredients in descending order of proportion by mass;

- f) date of manufacture;
- g) batch identification number/code;
- h) country of origin; and
- i) statutory warnings.

# 9 SAMPLING AND METHODS OF TEST

- **9.1** The products covered by the provisions of this standard shall be sampled as prescribed in MS 107.
- **9.2** The product shall be tested using appropriate standard methods declared in this draft standard.

# THE MALAWI BUREAU OF STANDARDS

The Malawi Bureau of Standards is the standardizing body in Malawi under the aegis of the Ministry of Industry, Trade and Tourism. 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.

