

**KENYA STANDARD**

**KS EAS 153: 2014**  
ICS13.060.20

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2015-06-29

# **Packaged drinking water — Specification**

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# KS EAS 153: 2014

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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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# Packaged drinking water — Specification

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# KS EAS 153: 2014

## NATIONAL FOREWORD

This Kenya Standard was prepared by the Technical Committee on Water 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 153, Packaged drinking water — Specification, published by 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.

### **c) Normative and informative annexes**

A 'normative' annex is an integral part of a standard, whereas an 'informative' annex is only for information and guidance.



**EAS 153: 2014**

ICS 13.060.20

## **EAST AFRICAN STANDARD**

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### **Packaged drinking water — Specification**

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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 153 was prepared by Technical Committee EASC/TC 075, *Environment, Health and Safety*.

This second edition cancels and replaces the first edition (EAS 153:2000), which has been technically revised.

## Packaged drinking water — Specification

### 1 Scope

This East African Standard specifies requirements and method of sampling and test for packaged drinking water for direct consumption.

### 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.

ASTM D 5907, *Standard test methods for filterable matter (total dissolved solids) and non-filterable matter (total suspended solids) in water*

EAS 13, *Containerized mineral water*

EAS 38, *Labelling of prepackaged foods — Specification*

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

ISO 10523, *Water quality — Determination of pH*

ISO 11423, *Water quality -- Determination of benzene and some derivatives*

ISO 12020, *Water quality — Determination of aluminium — Atomic absorption spectrometric methods*

ISO 13877, *Soil quality -- Determination of polynuclear aromatic hydrocarbons -- Method using high - performance liquid chromatography*

ISO 14402, *Water quality -- Determination of phenol index by flow analysis (FIA and CFA)*

ISO 15089, *Water quality -- Guidelines for selective immunoassays for the determination of plant treatment and pesticide agents*

ISO 16265, *Water quality -- Determination of the methylene blue active substances (MBAS) index -- Method using continuous flow analysis (CFA)*

ISO 16266, *Water quality — Detection and enumeration of pseudomonas aeruginosa — Method by membrane filtration*

ISO 21567, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Shigella spp*

ISO 22743, *Water quality -- Determination of sulfates -- Method by continuous flow analysis (CFA)*

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

ISO 6059, *Water quality — Determination of the sum of calcium and magnesium — EDTA titrimetric method*

ISO 6222, *Water quality — Enumeration of culturable microorganisms — Colony count by inoculation in nutrient agar culture media*

ISO 6332, *Water quality — Determination of iron-spectrometric method using 1, 10-phenanthroline*

ISO 6461, *Water quality — Detection and enumeration of the spores of sulphite reducing anaerobes (clostridia)*

ISO 6785, *Milk and milk products -- Detection of Salmonella spp.*

ISO 6888, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species)*

ISO 7027, *Water quality — Determination of turbidity*

ISO 7393, *Water quality -- Determination of free chlorine and total chlorine*

ISO 7887, *Water quality — Examination and determination of colour*

ISO 7888, *Water quality — Determination of electrical conductivity*

ISO 7899, *Water quality — Detection and enumeration of intestinal enterococci*

ISO 7980, *Water quality -- Determination of calcium and magnesium -- Atomic absorption spectrometric method*

ISO 8165, *Water quality -- Determination of selected monovalent phenols*

ISO 8245, *Water quality — Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)*

ISO 8288, *Water quality -- Determination of cobalt, nickel, copper, zinc, cadmium and lead -- Flame atomic absorption spectrometric methods*

ISO 9297, *Water quality — Determination of chloride — Silver nitrate titration with chromate indicator (Mohr's method)*

ISO 9308, *Water quality — Detection and enumeration of Escherichia coli and coliform bacteria*

ISO 9696, *Water quality -- Measurement of gross alpha activity in non-saline water -- Thick source method*

ISO 9697, *Water quality -- Measurement of gross beta activity in non-saline water -- Thick source method*

ISO 9964, *Water quality — Determination of sodium and potassium*

### **3 Terms and definitions**

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

#### **3.1**

##### **packaged drinking water**

water that has been suitably treated for human consumption filled and sealed in containers. It may contain minerals naturally occurring or intentionally added; it may contain carbon dioxide naturally occurring or intentionally added but does not contain sugars, sweeteners, flavourings or other food stuffs

**3.2****artesian well water**

water from a well tapping a confined aquifer in which the water level stands at some height above the top of the aquifer

**3.3****glacial water**

water which is derived from an approved source originating from and collected within a watershed containing a glacier, and is not derived from a public water system

**3.4****spring water**

water derived from an underground formation from which water flows naturally to the surface of the earth

**3.5****well water**

water from a hole bored, drilled, or otherwise constructed in the ground which taps the water of an aquifer

**3.6****purified water or demineralized water**

water which has been processed by distillation, deionization, reverse osmosis, or other suitable process, and contains no added substance,

Alternatively, this water may be called:

- a) deionized water if it is processed by deionization;
- b) distilled water if the water has been processed by distillation; and
- c) reverse osmosis water if the water has been processed by reverse osmosis.

**3.7****sterilized water**

water that has been processed to meet the "Test for sterility"

**3.8****enriched water**

water with added minerals

**3.9****prepared waters**

water that originates from other types of water supply suitably prepared before packaging

**3.10****potable water**

water that is safe and suitable for human consumption

**3.11****drinking water**

potable water intended for human consumption

**3.12****treated water**

water that has undergone through processes such as flocculation, coagulation, sedimentation, filtration and disinfection

**3.13****water quality**

the chemical, physical and biological characteristics of water in respect to suitability for human consumption

**3.14**

**safe water**

water that is free of physical, chemical and/or biological substances in concentrations which could cause illness or injury to consumers

**3.15**

**surveillance**

an independent continuous, specific measurement, observation and reporting for the purpose of water quality management and operational activities

**3.16**

**disinfection**

reduction by means of chemical agents and/or physical methods, of the number of micro-organism to a level that does not compromise public health

**3.17**

**container**

any bottle, carton, can or other container to be filled with water, properly labelled and intended for sale

## **4 Requirements for packaged drinking water**

### **4.1 General requirements**

**4.1.1** The location, construction, operation and supervision of water supply source, its reservoirs and its distribution system shall be subject of approval by the relevant authority

**4.1.2** Packaged drinking water may optionally contain safe and suitable antimicrobial agents. Fluoride may be optionally added.

**4.1.3** Artesian water may be collected with the assistance of external force to enhance the natural underground pressure as long as such measures do not alter the physical properties, composition, and quality of water.

**4.1.4** Glacial water should contain an amount of total dissolved solids, which at its collection point does not significantly differ from that of the glacier.

**4.1.5** Spring water shall be collected only at the spring or through a borehole tapping the underground formation feeding the spring. There should be a natural force causing the water to flow to the surface through a natural orifice. The location of the spring shall be identifiable.

Spring water shall have all the physical properties, before treatment, and be of the same composition and quality, as the water that flows naturally to the surface of the earth.

**4.1.6** Packaged drinking water shall be handled under hygienic conditions stipulated in EAS 39 Code of practice for food and drink industry,

### **4.2 Specific requirements**

**4.2.1** The physical characteristics affecting the quality of water

Packaged drinking water shall conform to the physical characteristics in Table 1.

**Table 1 — Physical requirements**

Sl. No.	Characteristic	Packaged drinking water	Method of test
i)	Colour (TCU max)	15	ISO 7887
ii)	Turbidity (NTU)	1 max. (NTU)	ISO 7027
iii)	pH	6.5 – 8.5	ISO 10523
iv)	Taste	Not objectionable	-
v)	Odour	Odourless	-
vi)	Conductivity ( $\mu\text{S}/\text{cm}$ )	2500	ISO 7887

#### 4.2.2 Chemical characteristics affecting only the quality of packaged drinking water

##### 4.2.2.1 Quality requirement

Potable water shall conform to the chemical characteristics affecting quality indicated in Table 2

**Table 2 — Quality requirements for packaged drinking water**

Sl. No.	Substance or characteristic	Packaged drinking water (mg/L max.)	Method of test
i)	Suspended matter	Not detectable	
ii)	Total dissolved solids	1500	ASTM D 5907
iii)	Total organic matter	0.003	ISO 8245
iv)	Total hardness, as $\text{CaCO}_3$ ,	300	ISO 6059
v)	Aluminium, as $\text{Al}^{+++}$ ,	0.2	ISO 12020
vi)	Chloride, as $\text{Cl}^-$	250	ISO 9297
vi)	Iron Fe	0.3	ISO 6332
vii)	Sodium, as $\text{Na}^+$	200	ISO 9964-1
viii)	Sulphate	400	ISO 22743
ix)	Zinc, as $\text{Zn}^{++}$	5	ISO 8288
x)	Magnesium, as $\text{Mg}^{++}$	100	ISO 7980
xi)	Calcium, as $\text{Ca}^{++}$	150	ISO 7980
xii)	Residual free chlorine	Not detectable	ISO 7393

##### 4.2.2.2 Inorganic contaminants

Packaged drinking water shall conform to the limits of inorganic contaminants affecting safety indicated in Table 3.

Table 3 — Limits for inorganic contaminants in packaged drinking water

Sl. No.	Substance	Limit of concentration mg/L, max.	Method of test
i)	Arsenic, as As	0.01	ISO 11969
ii)	Cadmium, as Cd	0.003	ISO 5961
iii)	Lead, as Pb	0.01	ISO 8288
iv)	Copper, as Cu	2.000	ISO 8288
v)	Mercury (total as Hg)	0.001	ISO 12846
vi)	Manganese, as Mn	0.1	ISO 6333
vii)	Selenium, as Se	0.01	ISO 9965
viii)	Ammonia (N)	0.5	ISO 11732
ix)	Chromium, as Cr	0.05	ISO 9174
x)	Nickel, as Ni	0.02	ISO 8288
xi)	Cyanide, as CN	0.01	ISO 6703
xii)	Barium, as Ba	0.7	ISO 11885
xiii)	Nitrate, as NO <sub>3</sub>	45	ISO 7890
xiv)	Boron	0.5	ISO 9390
xv)	Fluoride, as F	1.5 <sup>a)</sup>	ISO 10359
xvi)	Bromate, as BrO <sub>3</sub>	0.01	ISO 15061
xvii)	Nitrite	0.5	ISO 6777
xviii)	Phosphates, as PO <sub>4</sub> <sup>3-</sup>	2.2	ISO 15681

a) If the product contains more than 1.0 mg/L fluoride, the following term shall appear on the label as part of, or in close proximity to the name of the product on in any otherwise prominent position "water contains fluoride".

#### 4.2.3 Organic contaminants

Packaged drinking water shall conform to the limits of organic contaminants affecting safety indicated in Table 4.

Table 4 — Limits for organic constituents in packaged drinking water

SI. No.	Substance (Arrange alphabetical order)	Limit µg/L max.	Method of test
i)	<b><u>Aromatics</u></b>		
	Benzene	10	ISO 11423
	Toluene	700	-
	Xylene	500	-
	Polynuclear aromatic hydrocarbon	0.7	ISO 13877
ii)	<b><u>Chlorinated Alkanes and Alkenes</u></b>		
	Carbon tetrachloride	2	-
	1,2-Dichloroethane	30	-
	1,1-Dichloroethylene	0.3	-
	1,1-Dichloroethene	30	-
	Tetrachloroethene	40	-
iii)	<b><u>Phenolic substances</u></b>		
	Phenols	2	ISO 8165
	2,4,6-Trichlorophenol	200	ISO 14402
iv)	<b><u>Trihalomethanes</u></b>		
	Chloroform	30	-
v)	<b><u>Pesticides</u></b>		
	Aldrin/Dieldrin	0.03	ISO 15089
	Chlordane (total)	0.3	
	2,4- Dichlorophenoxyacetic acid	30	
	DDT (total)	1	
	Heptachlor and Heptachlor Epoxide	0.03	
	Hexachlorobenzene	1	
	Lindane BHC	2	
Methoxychlor	20		
vi)	Surfactants (reacting with methylene Blue)	200	ISO 16265
vii)	Mineral oil	0.01	-
viii)	Organic matter	3	-

### 4.3 Microbiological contaminants

Packaged drinking water shall conform to the limits indicated in Table 5.



**Table 5 — Microbiological limits for packaged drinking water**

SI. No.	Type of micro-organism	Limits	Method of test
i)	Total viable counts at 22 °C in mL, max. <sup>a</sup>	100	ISO 6222
	Total viable counts at 37 °C, in mL, max. <sup>a</sup>	50	
ii)	Total Coliforms in 100 mL	Absent	ISO 4832
iii)	<i>E. Coli</i> in 100 mL	Absent	ISO 9308-1
iv)	<i>Staphylococcus aureus</i> in 100 mL	Absent	ISO 6888-1
v)	Sulphite reducing anaerobes in 100 mL	Absent	ISO 6461-2
vi)	<i>Pseudomonas aeruginosa</i> fluorescence in 100 mL	Absent	ISO 16266
vii)	<i>Streptococcus faecalis</i> in 100mL	Absent	ISO 7899-2
viii)	<i>Shigella</i> in 100 mL	Absent	ISO 21567
ix)	<i>Salmonella</i> in 100 mL	Absent	ISO 6785
<sup>a</sup> ) This parameter is for monitoring the system at source. Total time before analysis should be not more than 6 h at 4 °C. Determination of total viable counts shall start within 12 h after collection of the packaged drinking water sample.			

#### 4.4 Radioactive characteristics

Packaged drinking water shall conform to the limits for radioactive materials stipulated in Table 6

**Table 6 — Limits for radioactive materials in packaged drinking water**

SI. No.	Radioactive material	Limits in Bq/L	Method of test
i)	Gross alpha activity	0.5	ISO 9696
ii)	Gross beta activity	1	ISO 9697

#### 5 Packaging

**5.1** The product shall be packed in sealable retail containers suitable for preventing the possible adulteration or contamination of water and shall be in accordance with environmental requirements of the EAC partner states.

**5.2** The package shall be made from food grade material and strong enough to withstand normal handling and transportation

#### 6 Labelling requirements

In addition to EAS 38, the following provisions shall apply.

## 6.1 The name of the product

6.1.1 The name of the product shall be the appropriate term as defined in 3.1

6.1.2 Water containing carbon dioxide that emerges from the source and is packaged directly with its entrapped gas or from which the gas is mechanically separated and later reintroduced at a level not higher than naturally occurring in the water, may bear on its label the words 'naturally carbonated' or 'naturally sparkling'.

6.1.3 Packaged water which contains carbon dioxide at levels than those naturally occurring in the source of the product shall be labelled with the words 'carbonated, carbonation added, or sparkling'.

## 6.2 Additional labelling requirements

### 6.2.1 Mineral content

If the content of total dissolved substances of the water is below 500 ppm or if it is greater than 1500 ppm, the statement "Low mineral content", or a similar term or the statement "High mineral content", or a similar term respectively, may appear on the principal display panel following the statement of identity.

The labelling shall indicate the average amount of, but not limited to the following specific minerals present in the product. The label shall describe the amount in mg/L. The following minimum parameters

Calcium,.....	as Ca
Magnesium,.....	as Mg
Sodium, .....	as Na
Potassium,.....	as K
Chloride, .....	as Cl
Sulfate,.....	as SO <sub>4</sub>
Iron,.....	as Fe
Fluoride,.....	as F

NOTE In addition the amount of TDS shall be declared in mg/L, and the pH value shall be declared in pH Units.

### 6.2.2 Fluoride

Packaged water containing added fluoride shall be labeled "Fluoridated water". Any water that is called fluoridated water shall contain not less than 0.8 mg/L fluoride ion. The product should not contain more than 1.5 mg/L of fluoride.

### 6.2.3 Geographic location

The geographic location may be indicated on the label for artesian, spring or well water.

### 6.2.4 Water from water distribution system

When drinking water is supplied by a public or private tap water distribution system, the wording "From a public or private distribution system" must appear along with the name of the product on the front of the main label.

### 6.3 Labelling prohibitions

**6.3.1** No claims concerning medicinal (preventive, alleviative or curative) or other beneficial effects relating to the health of the consumer shall be made in respect of the properties of the product covered by the standard.

**6.3.2** The way in which labels on the packaged water are presented must not cause confusion with other categories of water, particularly natural mineral water, as defined in the (EAS 13).

**6.3.3** The use of any statement or of any pictorial device, which may create confusion in the mind of the public or in any way mislead the public about the nature, origin, composition and properties of packaged drinking water put on sale, is prohibited.

### 6.4 Optional Labelling

**6.4.1** The following terms, descriptive of the particular properties of the product, may appear on the label as part of, or in close proximity to, the name of the product or in an otherwise prominent position, provided that conditions specified are adhered to:

- a) "Alkaline"  $\text{CaCO}_3$  where the product contains more than 600 mg/L;
- b) "Acidulous" where the product contains more than 250 mg/L free carbon dioxide;
- c) "Saline" where the product contains more than 1000 mg/L NaCl;
- d) "Contains Fluorine" where the product contains more than 1 mg/L F;
- e) "Contains Irons" where the product contains more than 5 mg/L Fe;
- f) "Contains Iodine" where the product contains more than 1 mg/L I; and
- g) "May be Diuretic" where the product contains more than 1000 mg/L total dissolved solids or 600 mg/L  $\text{HCO}_3$ .

**6.4.2** The following are also examples of optional labelling:

- a) trade name;
- b) the date of the authorization to commence collection and production; and
- c) the results of analysis of the water as it emerges at the source, including a statement of any treatment.

## 7 Sampling

### 7.1 Sampling requirements

A formal sampling programme shall be established and implemented. In the absence of a formally established sampling programme, the minimum sampling frequency given in Table 7 shall be used as an interim measure.

**Table 7 — Minimum frequency of sampling of water for surveillance**

Population served (P)	Frequency * (minimum) of sampling
P>100 000	10 samples every month per 100 000 of population served
25 001 – 100 000	10 samples every month
10 001 – 25 000	3 samples every month
2 500 – 10 000	2 samples every month
P<2 500	1 sample every month
* During the rainy season, sampling should be carried out more frequently	

## 7.2 Parameters for minimum monitoring

It is recognized that, in many instances, the cost of performing a full analysis against Table 1, Table 2, Table 3, Table 4, Table 5, Table 6 and Table 7 can be prohibitive.

Analysis of the parameters in Table 8 may be deemed acceptable for the purpose of indicating on going levels of operational efficiency in a water treatment plant. However, a relevant authority may require additional tests.

**Table 8 — Physico-chemical and microbiological parameters required for minimum monitoring**

Property	Methods of test
<b>Physicochemical:</b> Conductivity, or dissolved solids Colour Turbidity; Taste Odour	See Table 1
<b>Microbiological:</b> Faecal coliform bacteria or <i>E. coli</i> ; Shigella spp Salmonella spp	See Table 5
<b>Chemical:</b> Fluoride as F <sup>-</sup> Nitrate Nitrite pH value Aluminum Iron(total) Ammonia Residual chlorine	See Table 3

If abnormal results are encountered in any of these analyses, sampling frequency shall be increased and/or additional analyses carried out.

NOTE A consumer complaints register for the aesthetic qualities of the water should be maintained.

## 8 Sampling plan for packaged drinking water

**8.1** The quantity of packed water of the same type belonging to the same batch of manufacture and packed in a day shall constitute a lot.

**8.2** For ascertaining the conformity of the material to the requirements of the specification, samples shall be tested from each lot separately.

**8.3** The number of containers to be selected from a lot shall depend on the size of the lot and shall be done in accordance with Table 9.

Table 9 — Sampling plan

Number of containers in the Lot (L)	Sample size(number of containers)
$L \leq 5000$	3
$5000 < L \leq 10000$	5
$10000 < L \leq 15000$	7
$L > 15000$	9

## Annex A (normative)

### Water safety plans

**A.1** Packaged Drinking water operators shall develop, implement and maintain a water safety plan taking into consideration the potential risks to the safety of the water from the supply catchment area to the consumer.

**A.2** A water safety plan shall consist of three key components:

- a) system assessment to determine whether the drinking-water supply chain (up to the point of consumption) as a whole can deliver water of a quality that meets health-based targets;
- b) identifying control measures in a drinking water system that will collectively control identified risks and ensure that the health-based targets are met; and
- c) management plans describing actions to be taken during normal operation or incident conditions and documenting the system assessment (including upgrade and improvement), monitoring and communication plans and supporting programmes.

**A.3** A water safety plan shall include:

- a) measures to protect the source of drinking water from risks of pollution;
- b) measures to ensure all installations intended for the production of drinking water exclude any possibility of contamination. For this purpose and in particular:
  - the installation for collection, the pipes and the reservoirs shall be made from materials suited to the water and in such a way as to prevent the introduction of foreign substances in water;
  - the equipment and its use for production shall meet hygienic requirements;
- c) measures to ensure an appropriate treatment such as pre-treatment processes, coagulation, flocculation, sedimentation, filtration and disinfection are undertaken to assure the safety of water for the consumers;
- d) appropriate operational monitoring system including monitoring parameters that can be measured and for which limits have been set to define the operational effectiveness of the activity; frequency of monitoring and procedures for corrective action that can be implemented in response to deviation from limits. If, during production it is found that the water is polluted, the producer shall stop all operations until the cause of pollution is eliminated; and
- e) a verification plan to ensure that individual components of a drinking-water system, and system as a whole is operating safely.

## Annex B (informative)

### Surveillance

#### B.1 General surveillance requirements

Drinking-water producers shall ensure, at all times, the quality and safety of the water that they produce. Public health surveillance (that is, surveillance of health status and trends) contributes to verifying drinking-water safety.

Adequate infrastructure, proper monitoring and effective planning and management; and a system of independent surveillance are basic and essential requirements to ensure the safety of drinking-water.

Surveillance shall cover the total supply network from the source of untreated water to the consumer delivery points.

A sampling programme that takes into consideration appropriate international recommendations shall be established and implemented. The sampling shall be regular and its frequency shall mainly depend on the following factors

- a) quality of water harnessed including effects on the water from climatic, human and industrial activities;
- b) type of treatment for drinking worthiness;
- c) volume of water processed;
- d) risks of contamination;
- e) background of public water supply network;
- f) population served; and
- g) g)capabilities of the analytical facility (both in terms of capacity and in terms of analytical performance).



## **Bibliography**

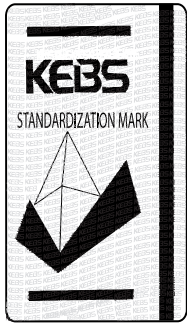
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# KENYA BUREAU OF STANDARDS (KEBS)

## 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.

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