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## **DRAFT EAST AFRICAN STANDARD**

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**Natural and extensible sack kraft paper — 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.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. 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 Principles and procedures for development of East African Standards.

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.

The committee responsible for this document is Technical Committee EASC/TC 065, *Paper and paper products*.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

This second edition cancels and replaces the first edition (EAS 868:2017), which has been technically revised



# Natural and extensible sack kraft paper — Specification

## 1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for natural and extensible sack Kraft paper.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 186, *Paper and board – Sampling to determine average quality*

ISO 187, *Paper board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples*

ISO 216, *Writing paper and certain classes of printed matter — Trimmed sizes — A and B series, and indication of machine direction*

ISO 287, *Paper and board — Determination of moisture content of a lot — Oven-drying method*

ISO 535, *Paper and board — Determination of water absorptiveness — Cobb method*

ISO 536, *Paper and board — Determination of grammage*

ISO 1924-3, *Paper and board — Determination of tensile properties — Part 3: Constant rate of elongation method (100 mm/min)*

ISO 2758, *Paper — Determination of bursting strength*

ISO 5636, *Paper and board — Determination of air permeance (medium range)*

ISO 6588-1, *Paper, board and pulps — Determination of pH of aqueous extracts — Part 1: Cold extraction*

ISO 6590-1, *Packaging — Sacks — Vocabulary and types — Part 1: Paper sacks*

## 3 Terms and definitions

For the purposes of this standard, the terms and definitions given in ISO 6590-1 shall apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <http://www.iso.org/obp>

**3.1****natural sack Kraft paper**

sack paper, basically produced without any additional treatment for improvement of the elongation in the machine direction

**3.2****extensible Kraft sack paper**

sack paper modified for the improvement of its elongation in the machine direction

**4 Requirements****4.1 General requirements**

**4.1.1** The paper shall be free from defects such as wrinkles, folds, paper dust, tears which have not been glued, stains, prominent marks, slime holes and foreign matters

**4.1.2** The edges of the rolls shall be clean and perpendicular to the axis of the roll. There shall be not more than three splices. Where glue is used, it shall not penetrate to the other layers.

**4.1.3** When supplied as rolls, the paper shall be wound on a hollow cylindrical core made in one continuous length. The length of the core shall not exceed the width of the paper and shall be as agreed between the manufacturer/ supplier and purchaser.

**4.1.4** The joint shall be clean, properly made and strong enough to prevent breakage of paper when run of a converting machine.

**4.2 Specific requirements**

**4.2.1** The paper shall comply with the requirements given in Table 1 when tested in accordance with the test methods referred to therein.

**Table 1 — Specific requirements for natural and extensible sack Kraft paper**

S/No	Characteristic	Requirement																Test method <sup>b</sup>	
		Natural sack Kraft										Extensible sack Kraft							
i.	Grammage, g/m <sup>2</sup> , ± 5 %	50	60	70	75	80	90	100	110	120	70	75	80	90	100	110	120	ISO 536	
ii.	Moisture content, %, m/m	4.0 - 8.5																ISO 287	
iii.	Tensile strength, kN/m, MD, min.	2.7	3.3	3.9	4.1	4.4	5.0	5.6	6.1	6.7	3.2	3.4	3.6	4.1	4.6	5.0	5.5	ISO 1924-3	
iv.	Tensile strength, kN/m, CD, min.	1.5	1.8	2.1	2.3	2.4	2.7	3.0	3.3	3.6	2.5	2.6	2.8	3.2	3.6	3.9	4.3		
v.	Stretch (elongation), %, MD, min.	1.6		1.8								3.5							

vi.	Stretch (elongation), %, CD, min.		4.0	5.0	
vii.	T.E.A index, J/g, min.	MD	0.7	2.2	
		CD	0.9	1.3	
viii.	Tear index, mNm <sup>2</sup> /g, (MD/CD), min		8		
ix.	Porosity, mL/min, min.		180		ISO 5636
x.	Water absorptiveness, g/m <sup>2</sup> , max.		35		ISO 535
xi.	Burst index <sup>a</sup> , kPa*m <sup>2</sup> /g, min.	Dry	3.5		ISO 2758
		Wet	0.15		
xii.	pH		[4.5 -9.5]		ISO 6588-1

**4.2.2** The manufacturer shall declare the dimensions of the roll. When in sheet form, it shall be of a series as prescribed in ISO 216. The permissible tolerance on the nominal dimension shall be  $\pm 0.5\%$ .

**4.2.3** Where the paper sack is used as primary packaging for food material, it shall comply with the microbiological requirements and limits of heavy metals and contaminants in EAS 930

## 5 Packaging and labelling

### 5.1 Packaging

The paper shall be in rolls or reams suitably packaged to prevent damage during transportation and storage.

### 5.2 Labelling

**5.2.1** Each package shall be legibly and indelibly labelled either in English, Kiswahili or French or a combination, with the following information

- name and physical address of the manufacturer;
- name of the product;
- grammage of paper in grams per square metre;
- width of the paper in metres;



- e) total weight of the reel in kilograms;
- f) roll number or batch/lot number for rolls
- g) batch/lot number for sheets; and
- h) country of origin/manufacture.

**5.2.2** Each bulk package shall be legibly and indelibly labelled either in English, Kiswahili or French or a combination, with the following information:

- a) name and physical address of the manufacturer
- b) name of the product;
- c) length and width of the sheet;
- d) number of reams;
- e) total weight in kilograms;
- f) grammage of the paper;
- g) country of origin/manufacture. and
- h) batch/code number

## **6 Sampling**

Sampling shall be done in accordance with ISO 186.

## Bibliography

EAS 868:2017, Natural and extensible sack Kraft paper — Specification

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