KENYA STANDARD

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ICS 59.080

Third Edition

Woven Apparel for blouses, shirts and dresses
TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

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National Industrial Training Authority (NITA)
Ministry of Industrialization and Trade
Blue Omnibus Ltd
Kenya Association of Manufacturers (KAM)
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Omega Apparels Ltd
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REVISION OF KENYA STANDARDS

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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Woven Apparel for blouses, shirts and dresses

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Foreword

This Kenya Standard was prepared by the Technical Committee on Fabrics, and it is in accordance with the procedures of the Kenya Bureau of Standards.

Woven cellulosic apparel fabrics of different varieties are manufactured using natural fibres. This standard therefore has been formulated with a view to help manufacturers in producing quality goods and in safeguarding the interest of consumers. It only specifies the performance requirements of cellulosic apparel fabrics of all varieties.

During the preparation of this standard reference was made to the following document:

ASTM D 3477: 1984, Performance specification for men’s and boy’s woven dress shirt fabrics


Acknowledgement is hereby made for the assistance received from this source.

KENYA STANDARD

1. Scope

This Standard specifies requirements, sampling, and test methods for woven apparel used for making blouses, shirts, and dresses.

This standard is not applicable to suiting fabrics for women and men apparel, kitenge, denim, cotton drills, khanga, uniform fabrics, jacket fabrics, pyjama, interlinings and lining fabric.

2. Normative references

KS ISO 105-B02, Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test
KS ISO 105 C10, Textiles — Tests for colour fastness — Part C10: Colour fastness to washing with soap or soap and soda
KS ISO 105 D01, Textiles — Tests for colour fastness — Part D01: Colour fastness to drycleaning using perchloroethylene solvent
KS ISO 105 E04, Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration
KS ISO 105-X11, Textiles — Tests for colour fastness — Part X11: Colour fastness to hot pressing
KS ISO 105 X12, Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing
KS ISO 105-E01 Colour fastness to water
KS ISO 1833, Textiles — Quantitative chemical analysis (All relevant parts)
KS ISO 3759 Textiles — Preparation, marking and measuring of fabric specimens and garments in tests for determination of dimensional change.
KS ISO 6330, Textiles- Domestic washing and drying procedures for textile testing
KS ISO 22198, Textiles — Fabrics — Determination of width and length
KS ISO 13934-1, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip
KS ISO 13937-1, Textiles — Tear properties of fabrics — Part 1: Determination of tear force using ballistic pendulum method (Elmendorf)
ISO 3801, Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area
ISO 5077, Textiles — Determination of dimensional change in washing and drying.
KS ISO 3071 Determination of pH of aqueous extract
ISO 2859-1, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.
ISO 3758:2023 Care labelling code using symbols.

3. Terms and definitions

There are no terms and definitions used in this standard.

4. Requirements

4.1 General requirements

4.1.1 Selvedge

When visually examined, the selvedge shall be straight and even.

4.1.2 Freedom from defects

When visually examined the fabric shall be reasonably free from spinning, weaving, and finishing defects.
4.2 Specific requirements

4.2.1 Colour fastness

The colour fastness of the fabric shall comply with the requirements stated in Table 1 when tested in accordance with test methods prescribed therein.

4.2.2 Physical requirements

The physical requirements of the fabric shall comply with the requirements stated in Table 2 when tested in accordance with test methods prescribed therein.

4.2.3 Dimensions

4.2.3.1 The width of each roll or piece under test shall not vary at any place by more than 1 % below the declared or marked width. This shall be determined in accordance with KS ISO 22198

4.2.3.2 The length of each roll or piece under test shall not be less than the declared value. This shall be determined in accordance with KS ISO 22198.

4.2.4 Fibre composition and proportion

The fibre composition and proportion of the fabric shall be as declared on the label, when tested in accordance with the relevant part(s) of ISO 1833. Where the fabric is a blend of two or more fibres, the fibre composition and proportion shall be as declared on the label, subject to a tolerance of ±5 %, when tested in accordance with the relevant part(s) of ISO 1833

4.2.5 Restricted chemical substances

4.2.5.1 The fabric shall not contain:
   a) restricted aromatic amines exceeding 30 mg/kg, when tested in accordance with ISO 14362-1 and ISO 14362-3, and
   b) carcinogenic dyestuffs exceeding 20 mg/kg, when tested in accordance with ISO 16373

Table 1 — Colour fastness requirements

<table>
<thead>
<tr>
<th>S/N</th>
<th>Parameter</th>
<th>Requirement min.</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Colour fastness to light</td>
<td>5</td>
<td>KS ISO 105-B02</td>
</tr>
<tr>
<td>ii.</td>
<td>Colour fastness to washing</td>
<td>Colour change</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>KS ISO 105 C10 Test number C</td>
</tr>
<tr>
<td>iii.</td>
<td>Colour fastness to dry-cleaning</td>
<td>Colour change</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>KS ISO 105 D01</td>
</tr>
<tr>
<td>iv.</td>
<td>Colour fastness to perspiration (acid and Alkali)</td>
<td>Colour change</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>KS ISO 105 E04</td>
</tr>
<tr>
<td>v.</td>
<td>Colour fastness to rubbing,</td>
<td>Staining</td>
<td>Dry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>wet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>KS ISO 105 X12</td>
</tr>
<tr>
<td>vi.</td>
<td>Colour fastness to hot pressing</td>
<td>Colour change</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>KS ISO 105-X11</td>
</tr>
<tr>
<td>vii.</td>
<td>Color fastness to water</td>
<td>Colour change</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staining</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ISO 105-E01</td>
</tr>
</tbody>
</table>
5 Packaging

Fabric shall be suitably packaged and wrapped to prevent soiling.

6 Labelling

Each unit package shall bear a label legibly and indelibly marked with the following information:

i) fibre composition and proportion.
ii) width (in centimetres) and length of piece (in metres).
iii) manufacturer’s name.
iv) registered trademark if any.
v) country of manufacture.
vi) care instructions in accordance with KS ISO 3758

7 Sampling

Sampling shall be done in accordance with ISO 2859-1.

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**Table 2 — Physical requirements**

<table>
<thead>
<tr>
<th>No</th>
<th>Characteristic</th>
<th>Requirements</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Dimensional change to washing, %, Max After 5 washings</td>
<td>Warp 4 Weft</td>
<td>ISO 5077 ISO 6330-4N ISO 3759</td>
</tr>
<tr>
<td>ii.</td>
<td>pH value</td>
<td>4-9</td>
<td>KS ISO 3071</td>
</tr>
<tr>
<td>iii.</td>
<td>Tearing strength, N, min. (Both directions)</td>
<td>9</td>
<td>KS ISO 13937-1</td>
</tr>
<tr>
<td>iv.</td>
<td>Breaking strength, N, min (Both directions)</td>
<td>111</td>
<td>KS ISO 13934-2</td>
</tr>
</tbody>
</table>