# **DUS 2480**

# DRAFT UGANDA STANDARD

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# **Textiles — Canvas — Specification**



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# Foreword

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(a) a member of International Organisation for Standardisation (ISO);

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(c) the National Enquiry Point on TBT Agreement of the World Trade Organisation (WTO).

The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of key stakeholders including government, academia, consumer groups, private sector and other interested parties.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

The committee responsible for this document is Technical Committee UNBS/TC 315, *Textiles and related products.* 

# **Textiles — Canvas — Specification**

#### 1 Scope

This Draft Uganda Standard specifies requirements, sampling and test methods for canvas fabrics.

This Standard is not applicable to canvas fabric used in making tents and tarpaulins, of which there are more specific Standards; FDEAS 1072 and FDEAS 1073.

#### 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.

US ISO 105-B02, Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test

US ISO 105-C10, Textiles — Tests for colour fastness — Part C10: Colour fastness to washing with soap or soap and soda

US ISO 105-X12, Textiles — Tests for colour fastness — Part X12: Colour fastness to rubbing

US ISO 1833 (all parts), Textiles — Binary fibre mixtures — Quantitative chemical analysis

US ISO 2859-1, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

US ISO 3071, Textiles — Determination of pH of aqueous extract

US ISO 3801, Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area

US ISO 5077, Textiles — Determination of dimensional change in washing and drying

US ISO 6330, Textiles - Domestic washing and drying procedures for textile testing

US ISO 13934-1, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method

US ISO 13937-1, Textiles — Tear properties of fabrics — Part 1: Determination of tear force using ballistic pendulum method (Elmendorf)

US ISO 22198, Textiles — Fabrics — Determination of width and length

ISO 14362-1, Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres

ISO 14362-3, Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene

ISO 16373-1, Textiles — Dyestuffs — Part 1: General principles of testing coloured textiles for dyestuff identification

ISO 16373-2, Textiles — Dyestuffs — Part 2: General method for the determination of extractable dyestuffs including allergenic and carcinogenic dyestuffs (method using pyridine-water)

ISO 16373-3, Textiles — Dyestuffs — Part 3: Method for determination of certain carcinogenic dyestuffs (method using triethylamine/methanol)

EAS 256, Textiles — Method for determination of scouring loss in grey and finished cotton materials

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

#### canvas

durable, plain, tightly-woven fabric usually made of cotton or linen or along with their blends

**3.2 pliability** easily bent without breaking

#### 4 Classification of canvas fabrics

Depending on the density of the weave, canvas fabric comes in two types:

- a) plain canvas; and
- b) duck canvas

NOTE Duck fabric usually contains plied fibres in both the warp and weft hence is often heavier and stronger than the "commonly known" canvas fabric which may have single ply for both warp and weft.

#### 5 Requirements

#### 5.1 General requirements

5.1.1 Canvas fabric shall be free from objectionable flaws including, floats, missing threads, printing or dyeing defects, bars, slubs and any other defect which may significantly mar the appearance or affect the serviceability or durability of the textile

**5.1.2** The proofing on canvas fabric shall show no tendency to crack when folded

#### 5.2 Specific requirements

#### 5.2.1 Fibre composition

The fibre composition of the canvas fabric shall be as declared on the label, subject to a tolerance of  $\pm$  3 % when tested in accordance with a relevant part of US ISO 1833.

#### 5.2.2 Dimensions

The dimensions of the canvas fabric shall be as declared on the label, subject to a tolerance of  $\pm$  1.5 cm when tested in accordance with US ISO 22198.

#### 5.2.3 Restricted colourants

Canvas fabric shall be free from listed restricted colourants when tested in accordance with ISO 14362-1, ISO 14362-3, ISO 16373-2 and ISO 16373-3. Colourants on textiles shall be identified and classified in accordance with ISO 16373-1.

#### 5.2.4 Physical and chemical requirements

Canvas fabric shall comply with the requirements given in Table 1 when tested in accordance with the test methods specified therein.

Parameter			Requirement		Test method
		Plain canvas	Duck canvas		
Mass per unit area, g/m <sup>2</sup> , min.		150	340	US ISO 3801	
Tensile strength, N, min.	Warp direction		196	650	US ISO 13934- 1
	Weft direction		147	400	
Tearing strength, N, min.	Warp direction		9.8	30	US ISO 13937- 1
	Weft direction		6.9	24	
Shrinkage or elongation, %. max.	Grey		5.0		US ISO 5077
	Scoured or dyed		2	2.5	and US ISO 6330
pH value			6.0 - 8.5		US ISO 3071
Scouring loss, %, max.	Grey		5.0		EAS 256
	Scoured or dyed		2.5		
Colourfastness (for dyed canvas), to:	Light, min.		4		US ISO 105- B02
	Washing, min.		4		US ISO 105- C10
	Rubbing, min.	Dry		3	US ISO 105- X12
		Wet		2	

#### Table 1 — Physical and chemical requirements of canvas fabric

#### 5.2.5 Proofed canvas

#### 5.2.5.1 Proofing content

**5.2.5.1.1** The proofing content shall not exceed 15 % by mass when tested in accordance with Annex A.

**5.2.5.1.2** The proofing mixture shall not contain any ingredient which is liable to damage the proofed canvas.

#### 5.2.5.2 Pliability

Proofed canvas shall be pliable when the sample is kept for 2 hours at 0  $^{\rm 0}{\rm C}$  and examined immediately thereafter.

## 6 Packaging

Canvas shall be packaged in such a way so as to avoid damage during storage as well as transit.

### 7 Labelling

Canvas shall be clearly and indelibly labelled with the following:

- a) manufacturer's name and/or trademark and physical address;
- b) name of the product such as "Canvas," ;
- c) classification of fabric such as "Plain" or "Duck";
- d) fibre composition;
- e) width and length of the canvas; and
- f) country of origin.

### 8 Sampling

Sampling shall be done in accordance with ISO 2859-1

## Annex A (normative)

# Determination of the proofing content

### A.1 Procedure

Cut four pieces of the material 80 mm  $\times$  80 mm accurately from different places in a sample of proofed canvas or duck and condition them for 24 hours under standard atmospheric conditions. Weigh the conditioned pieces accurately and subject them to successive extractions in a Soxhlet apparatus with a) carbon tetrachloride for 3 hours, b) ractified spirit for 2 hours and c) water for 2 hours.

After the above treatment, the material may contain pigments in the interstices of the fabric. To remove these, separate individual threads from the pieces, collect together and give light treatment with soap. Dry and condition the sample in an atmosphere of 65%  $\pm$  2% relative humidity and at a temperature of 27 °C  $\pm$  2 °C and weigh.

NOTE Other solvents may be used in case the proofing material is not extracted by solvents (carbon tetrachloride and rectified spirit).

## A.2 Calculation

Calculate the mass of the proofing from the difference between the initial mass of the test pieces and the mass of the threads after deproofing, and express as a percentage of the deproofed fabric.

# Bibliography

- [1] IS 6803 (1972): Special Proofed Canvas and Duck [PCD 13: Rubber and Rubber Products]
- [2] IS 1422:1983, Cotton duck
- [3] IS 1424 (1983): Cotton canvas

#### **Certification marking**

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