

DRAFT UGANDA STANDARD

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School wear fabrics — Part 5: Polyester and Cotton fabrics

DRAFT FOR PUBLIC REVIEW



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Contents

Page

Foreword	iv
1 Scope	5
2 Normative references	5
3 Requirements	6
3.1 General	6
3.2 Fabric	6
3.3 Defects	6
4 Packing, labelling, marking and inspection	7
Annex A (Normative) Notes to purchasers	8
Annex B (Informative) Recommended end use	9
Annex C (Informative) Guide to manufacturers and purchasers	10

Foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to co-ordinate the elaboration of standards and is

- (a) a member of International Organisation for Standardisation (ISO) and
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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 7, [Textile, Leather, Paper and Related products], Subcommittee SC 1, [Textile and Related products].

DUS 1700 consists of the following parts, under the general title School Clothing:

Part 1: Basic requirements

Part 2: Blazer fabrics

Part 3: Polyester and wool fabrics

Part 4: Polyester and viscose fabrics

Part 5: Polyester and cotton fabrics

Part 6: Shirting and blouse fabrics

Part 7: Fabrics containing textured yarns

Part 8: Warp knitted fabrics

School wear fabrics — Part 5: Polyester and Cotton fabrics

1 Scope

This part of DUS 1700 covers the requirements for polyester-and-cotton fabrics, of two weave structures, suitable for use in the manufacture of school clothing

2 Normative references

The following referenced documents 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.

DUS 1789, *Standard Test Methods for Quantitative Analysis of Textiles*

DUS ISO 9073-1, *Textiles — Test methods for nonwovens — Part 1: Determination of mass per unit area*

DUS ISO 12945-3, *Textiles — Determination of the fabric propensity to surface pilling, fuzzing or matting — Part 3: Random tumble pilling method*

DUS ISO 13935-1, *Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 1: Determination of maximum force to seam rupture using the strip method*

DUS ISO 13935-2, *Textiles — Seam tensile properties of fabrics and made-up textile articles — Part 2: Determination of maximum force to seam rupture using the grab method*

US 441-2/ISO 7211-2, *Textiles — Woven fabrics — construction — Methods of analysis — Part 2: Determination of number of threads per unit length*

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-E04, *Textiles — Tests for colour fastness — Part E04: Colour fastness to perspiration*

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

US ISO 1833-1, *Textiles — Quantitative chemical analysis — Part 1: General principles of testing*

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 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force*

DUS 1700-1, *School wear fabrics — Part 1: General requirements*

3 Requirements

3.1 General

The fabric shall

- a) comply with the basic requirements given in DUS 1700-1;
- b) have been made from single yarns;
- c) have been singed and heat-set; and
- d) have a bleached, or a dyed or a printed pattern of the required design and colour(s)(see A.1).

3.2 Fabric

The fabric shall comply with the relevant requirements given in table 1

3.3 Defects

The assessment and stringing of defects, in terms of 4.8 of DUS 1700-1, shall be based on the following LAQ's:

- a) For pieces: 12
- b) For a lot: 10

Table 1—Fabric requirements

1	2	3	4
Property	Requirement		US number (unless otherwise indicated)
Composition, % Polyester, min Cotton, min	50 30		US ISO 1833-1
Weave^a	Hair cord	Twill	Visual examination
Breaking strength, N, min Warp weft	660 400	860 310	US ISO 13934-1
Seaming properties (after washing) Resistance to opening at seams, N, min^a Seam strength, N, min^a	150 165		DUS ISO 13935-1 and DUS ISO 13935-2
Ply of yarns Warp weft	1 1		Visual examination

Resistance to pilling , Rating, min	3-4 (i.e. slight to moderate)	DUS ISO 12945-3
Removable non-fibrous material content , %, max	5	DUS 1789
Dimensional changes on washing , %, max Warp Weft	2 2	US ISO 5077
Colour fastness to washing , rating, min: Change in colour Staining of transfer cloths	4 3-4	US ISO 105-C10
Perspiration , rating, min: Change in colour Staining of transfer cloths	4 3-4	US ISO 105-E04
Rubbing , rating, min: Dry Wet	4 3-4	US ISO 105-X12
Light , rating, min	5	US ISO 105-B02
a As required.		
b Both warp and weft directions		

4 Packing, labelling, marking and inspection

The relevant clauses of DUS 1700-1 shall apply (see A.1).

Annex A (Normative)

Notes to purchasers

A.1 The following requirements shall be specified in tender invitations and in each order or contract:

- a) the finish and, in the case of a plain dyed fabric, the colour (see 3.1 and 4.7 of DUS 1700-1);
- b) when a printed pattern is required, the design and colour(s) (see 3.1 and 4.7 of DUS 1700-11);
- c) the weave structure required (see table 1);
- d) when relevant, that a particular percentage fibre blend is required (see table 1); and
- e) the method of packing, if other than as specified (see 6.1 of DUS 1700-1); and additional marking, if required (see 6.3 of DUS 1700-1).

A.2 The following requirements shall be agreed upon between the purchaser and the supplier:

- a) the acceptance of split or fringe selvages (see 4.3 of DUS 1700-1); and
- b) the fabric width (see 4.4 of DUS 1700-1).

Annex B (Informative)

Recommended end use

The recommended end use for the weave structures of fabrics that comply with the requirements of this part of DUS 1700 is given in table B.1.

Table B.1 — Recommended end use for weave structures

1	2
Weave structure	End use
Twill	Boys' trousers and shorts
Twill	Shirts
Cord or twill	Girls' dresses, tunics and gyms

Annex C (Informative)

Guide to manufacturers and purchasers

The fabric types given in table C.1 have been found suitable for use in the manufacture of polyester-and-cotton school clothing.

Table C.1 —Suitable fabric types

1	2	3	4	5
Property	Requirement			US number (unless otherwise indicated)
	Type ^a			
	SD70	SD75	SD71	
Composition, % Polyester Cotton	65±5 35±5			US ISO 1833-1
Weave	Hair-cord	2/1 twill		Visual examination
Mass per unit area (free from non-fibrous material), g/m ² ,min	125	145	180	US ISO 3801/DUS ISO 9073-1
Number of threads per cm, min: Warp Weft	41 26	49 23	44 24	US 441-2/ISO 7211-2
a Designation by the type number is restricted to fabrics that comply with the above requirements.				

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