# **DRAFT UGANDA STANDARD**

Second Edition 2021-mm-dd

**Duplicating paper — Specification** 



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## **Foreword**

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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 7, Textiles, leather, paper and related products, Subcommittee SC 3, Paper and paper products.

This second edition cancels and replaces the first edition (US 435:2003), which has been technically revised The main changes compared to the previous edition are as follows:

- the clause for normative references has been added.
- Inclusion of Table 1 to give the different duplicating paper sizes
- Inclusion of test methods in the table indicating the physical and optical properties for duplicating papers

## **Duplicating paper** — Specification

## 1 Scope

This Draft Uganda Standard specifies the requirements for duplicating papers. The standard applies to duplicating papers for stencil duplicators using emulsion or oil based inks paragraph.

#### 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 5636-3, Paper and board — Determination of air permeance (medium range) — Part 3: Bendtsen method

ISO 8791-2, Paper and board — Determination of roughness/smoothness (air leak methods) — Part 2: Bendtsen method

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

US ISO 536, Paper and board — Determination of grammage

US ISO 2470-1, Paper, board and pulps — Measurement of diffuse blue reflectance factor — Part 1: Indoor daylight conditions (ISO brightness)

US ISO 2471, Paper and board — Determination of opacity (paper backing) — Diffuse reflectance method

#### 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

#### 2.1

#### duplicating paper

absorbent or semi-absorbent paper, unsized or slack-sized, with a matt finish, used for making copies from a stencil duplicating machine

#### 2.2

## chemical wood pulp

wood reduced to pulp by a chemical process, for example, sulphite or sulphate, which eliminate the greater part of the non-fibrous components

#### 2.3

## mechanical pulp

pulp obtained from wood entirely by mechanical means, for example, by the action of a grindstone or refiner

## 4 Requirements

#### 4.1 General

## 4.1.1 Composition

The paper shall be composed of bleached chemical wood pulp and/or mechanical pulp.

#### 4.1.2 Sizing

The paper shall be engine sized.

#### 4.1.3 Uniformity

The paper shall be of uniform formation, thickness and substance, and shall be evenly finished, free from specks, holes and other blemishes.

#### 4.1.4 Cutting

The paper shall be cut square, with clean edges, by guillotine or other effective means, and with the machine direction consistent with the longer measurement.

#### 4.1.5 Sizes

**4.1.5.1** The paper shall be manufactured according to the sizes indicated in Table 1. These measurements shall be taken with the aid of a metre rule under a standard testing atmosphere specified in ISO 187

## **4.1.5.2** The permitted size tolerance shall be $\pm 2$ mm

Table 1 — Duplicating paper sizes

Designation	Dimensions		
	mm		
4A0	1 682 × 2 378		
2A0	1 189 × 1 682		
A0	841 × 1 189		
A1	594 × 841		
A2	420 <b>x</b> 594		
А3	297 × 420		
A4	210 × 297		
F/S	203 × 330		
A5	148 × 210		
A6	105 × 148		
A7	74 × 105		

A8	52 × 74
A9	37 <b>x</b> 52
A10	26 <b>x</b> 37

## 4.2 Performance requirements

- **4.2.1** The paper shall allow the production of duplicated copies free from set-off and excessive print-through.
- 4.2.2 There shall be no feathering when using duplicating ink

## 4.3 Physical and optical requirements

The paper shall comply with the physical and optical requirements specified in Table 2 below, when tested according to the test methods specified therein.

Table 2 — Physical and optical properties for duplicating papers

Characteristic	Requi	Test method	
	Type A	Type B	
Grammage, g/m <sup>2</sup> ±5%	70	80	US ISO 536
Roughness, ml/min, max.	700	700	ISO 8791-2
Porosity, ml/min, max.	1 200	1 200	ISO 5636-3
Opacity, % Min.	88	88	US ISO 2471
Brightness, % min. (for white paper only)	72	72	US 2470-1

## 4 Packaging

The paper shall be delivered flat and correctly put up in packets. The packets shall be well wrapped with firmly secured ends, and be capable of withstanding multiple handling.

## 5 Labelling

Each packet shall be clearly labelled with the following information:

- a) description of the paper, that is duplicating paper;
- b) grammage;
- c) dimensions of the duplicating papers;
- d) colour of the paper;
- e) number of sheets in the packet; and
- f) name of the manufacturer or importer or supplier, or registered trade mark.

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