

Draft Tanzania Standard
Textiles – Specification for open mouth woven poly-sacks
made from polypropylene tape- yarns



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DRAFT TANZANIA STANDARD

TDC3(5126)p3

Textiles – Specification for open mouth woven poly–sacks made from polypropylene tape- yarns

0 Foreword:

0.1 This 3rd edition Draft Tanzania Standard has been improved to include other requirements which were not specified in the 2nd edition.

0.2 It has been improved to assist manufacturers of woven poly sacks produced from polypropylene tape yarns by specifying the characteristic requirements of various sacks for packing different products.

0.3 In the preparation of this Draft Tanzania Standard assistance was derived from:

- I. BS 6162: *Specification for open mouth sacks manufactured from woven polyolefin tape yarn.*
- II. IS11652: *Woven sacks for packing cement – high density polyethylene/polypropylene*, published by Bureau of India Standards.

0.4 For the purpose of deciding whether a particular requirement of this Draft Tanzania Standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with TZS 4:2009 (see clause 2).

1 Scope

This Draft Tanzania Standard specifies minimum requirements for materials, dimensions, and performance of the open mouth poly - sack manufactured from plain woven fabric produced from polypropylene tape yarns.

2 References

For the purpose of this Draft Tanzania Standard the following references shall apply:

- I. TZS 4: 2009, *Rounding off numerical values*
- II. TZS 20: 1987, *Textiles – Woven fabrics – Determination of number of threads per unit length and per unit width*
- III. TZS 21: 1979, *Textiles – Woven or knitted fabrics – Determination of mass per unit length and per unit area*
- IV. TZS 22: 1979, *Textiles – Woven fabrics – Determination of breaking load and extension*
- V. TZS 44: 1979, *Textiles – Woven or knitted fabrics – Determination of width and length.*

3 Definitions and Terminology

For the purposes of this Draft Tanzania Standard, the following terms and definitions shall apply.

3.1 Polymer (polymerization) - A combination or association of molecules that may be of one compound or two or more reacting simultaneously to form a regular system of molecules behaving as one unit.

3.2 Polypropylene tape yarns- Flat yarn composed of polypropylene polymer.

3.3 Fabric weaves-The pattern of interlacing of the warp (the tapes running in the machine or longitudinal direction of the woven material) and the weft (the tape yarns in the transverse direction).

3.4 Sack weave-The number of tapes per 100 mm running in the longitudinal direction of the sack by the number of tapes per 100 mm in the transverse direction.

3.5 Woven polypropylene fabric- A sheet material woven from polypropylene tape yarns.

3.6 Coated fabric- A fabric coated on one or both sides with suitable polymer.

3.7 Poly-sack- A flexible container, made from fabric manufactured from woven polypropylene tape yarns.

3.8 Liner- A single ply flexible container which may be bonded or loosely inserted in the sack.

4 Materials

4.1 Fabric

The weave of the fabric shall be plain, woven from polypropylene tape yarns and its construction described as warp by weft in tapes per 10 cm, and the fabric shall be uncoated or coated on one side or both.

4.2 Stitch threads.

The stitching thread shall be made from either;

- I. Polypropylene or
- II. Other materials provided they are not adversely affected by the expected climatic conditions in transit, storage and use.

5 Dimensions

5.1 Expression of dimensions

5.1.1The dimensions of a sack shall be expressed as follows;

- I. face width x length, in centimetres, for an open mouth flat sack (see figure 1, on page 5).
- II. face width x length, of gusset in centimetres, for an open mouth gusseted sack (see figure 2 on page 5); regardless of whether the length is greater or less than the face width.

5.1.2The dimensions of a tape yarn shall be;

- I. Tape width shall be between 0.3 to 0.6 centimetres wide.
- II. Monofilament continuous tape shall be used for fabric weaving
- III. Tape width shall have a tolerance of $\pm 2\text{mm}$. (see table 1)

6 Construction

6.1 Sack

The sack shall be produced either;

- I. From material woven as a tube or
- II. From Flat woven material, and cut to the required length.

6.2 Edge sealing

All edges shall be sealed to prevent flying.

6.3 Base closure

The base closure shall be such as to ensure compliance with the performance required.

6.4 Turned-over and stitched

Where the base closure is affected by a turned-over and stitched seam, the turn over shall be 2.0 cm minimum, and the stitch line shall be 1.0 ± 3 cm from the base so formed and shall pass through all four thicknesses of the material.

6.5 Seam

The stitching shall be done at the bottom and at the mouth of the sack excluding value. It shall be done with a single or two rows of the lock or chain stitches.

6.6 Mouth

The mouth of the sack shall be either;

- I. plain, formed from the selvedge or from sealed raw edge,
- II. hemmed with a single or double foldover stitched continuously round the mouth of the sack.

6.7 Liners

Where liners are used they shall be either;

- I. Loosely inserted or,
- II. Anchored with adhesive (or other suitable medium). or
- III. Stitched at the base closure or
- IV. Stitched at the mouth.

7 Sack types and identification;

7.1 Sack types

- I. Sacks shall be manufactured in five types and shall conform to the requirements shown in table 1.
- II. Other types of sacks shall be manufactured to order as agreed between the manufactures and buyers requirements.

Table 1 - recommended Poly-sacks specifications.

Sn	Dimensions		Ends/dm	Picks/dm	Mass in g/m ² (min)	Breaking load (5 x 20cm strip)		Capacity (In kgs)
	Sack Length	Face width				warp way	Weft way	
1	45 cm±2	30 cm ±2	10 ±2	10 ±2	50	40 kgf	40 kgf	5
2	78 cm ±2	48 cm ±2	55 ±2	55 ±2	90	50 kgf	50 kgf	25
3	110 cm ±2	56 cm ±2	14 ±2	14 ±2	80	50 kgf	50 kgf	50
4	110 cm ±2	76 cm ±2	39 ±2	39 ±2	51	50 kgf	50 kgf	90
5	135 cm ±2	85 cm ±2	10 ±2	10 ±2	50	50 kgf	50 kgf	110
Test method	TZS 44		TZS 20		TZS 21	TZS 22		Weighing (GWT)

7.2 Identification of a sack

For the purpose of identification, coloured tape yarns shall be incorporated into the weaving process of a sacking fabric as per customers requirement.

8 Packing

A bale shall be composed with one thousand or five hundred sacks and it shall be formed using a well secured polypropylene woven fabric.

9 Marking

9.1 Marking of packed bale

The following information shall be marked on each bale with indelible ink.

- I. Name of the manufacturer;
- II. Description of the goods;
- III. Baled quantity;
- IV. Number of the bale.

9.2 Marking of sacks

Each sack shall be marked with the information as required by the customer.

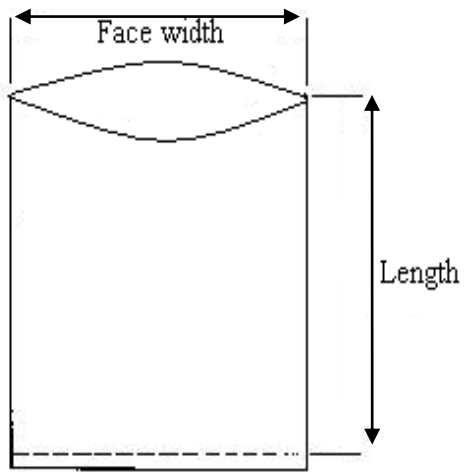


Figure 1. Open-mouth flat sack.

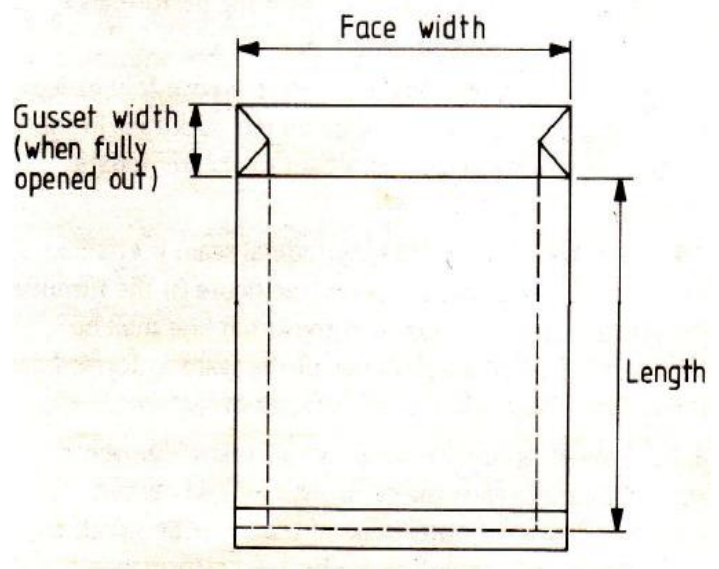


Figure 2. Open-mouth gusseted sack.