



DRAFT TANZANIA STANDARD

TEXTILES — Polypropylene Twines — Specification

TANZANIA BUREAU OF STANDARDS

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National Foreword

This Tanzania Standard was published under the authority of the Board of Director of Tanzania Bureau of Standards.

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established by the Standards Act Cap. 130.

Tanzania Standards are developed through Technical Committees that are representative of key stakeholders, including government, academia, consumer groups, private sector and other interested parties.

The Technical Committees work under the supervision of Divisional (sectoral) Committees. The Standards are developed in accordance with the Guide and Procedure for Development of Tanzania Standards and TZS 0, Guide for presentation of Tanzania Standards.

Tanzania Standards are subject to review, to keep pace with science and technological advances. Users of the Tanzania Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

This Tanzania Standard was developed under the supervision of the Textile Divisional Standards Committee (TDC). The Technical Committee responsible for the standard is (TDC 8- Yarns and Twines)

The reporting of the results of a test or analysis made in accordance with this Tanzania Standard, if the final value, observed or calculated is to be rounded off, shall be done in accordance with TZS 4.

1. Scope

This Draft Tanzania Standard prescribes the constructional details and other requirements of polypropylene twines.

2. Normative references

The following referenced documents are indispensable for the application of this Draft Tanzania Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

TZS 3, *Atmospheric conditions for testing*

TZS 4, *Rounding off numerical values*

3. Terms and definitions

For the purpose of this document, the following terms and definitions shall apply;

3.1

spool

cross – wound cylindrical unit of twine

3.2

sample length

length of twine taken from any one spool sufficient to obtain the required number of specimens for strength, linear density and runnage determinations

3.3

runnage

normal measure of the size of twine, expressed in meters per kilogram

3.4

bright Yarn-

General term for lustrous yarn as contrasted to dull, semi-dull, extra-dull or matt yarn

3.5

cabled Yarn

Yarn produced by twisting two or more plied yarns.

3.6

filament Yarn

yarn composed of continuous filaments assembled with or without twist;

3.7

breaking Load

Pulling force applied to a yarn that causes it to snap or break

4.1 General requirements

4.1.1 The yarn used for manufacture of the twine shall be polypropylene multifilament yarn of appropriate denier as required for that particular construction of twine as given in Table 1

4.1.2 The twist in the twine shall be in the opposite direction to that of yarn. The twine shall be evenly twisted and free from defects.

4.2 Specific requirements

The Twine shall comply with the requirements for each constructional detail as specified in Table 1.

Table 1 Requirements of Polypropylene Twines
(Clauses 4.1, 5 and 8.2.1)

Sl No.	Construction ¹⁾	Runnage (m/kg)	Breaking Load N(kgf) ²⁾ Min	Elongation Percent at Break	Turns/Metre ³⁾	
					Strand	Twine
i)	56 tex × 1 × 2 (500d × 1 × 2)	8 570	58.9 (6.00)	20 to 40	280	240
ii)	61 tex × 1 × 2 (550d × 1 × 2)	8 140	61.8 (6.30)		280	240
iii)	67 tex × 1 × 2 (600d × 1 × 2)	7 000	64.7 (6.60)		280	240
iv)	67 tex × 1 × 3 (600d × 1 × 3)	4 500	95.2 (9.70)		300	150
v)	67 tex × 2 × 3 (600d × 2 × 3)	2 200	190.3 (19.40)		300	150
vi)	72 tex × 1 × 2 (650d × 1 × 2)	6 660	68.7 (7.00)		300	150
vii)	93 tex × 1 × 2 (840d × 1 × 2)	5 100	88.3 (9.00)		300	190
viii)	93 tex × 1 × 3 (840d × 1 × 3)	3 250	132.4 (13.50)		280	240
ix)	93 tex × 2 × 3 (840d × 2 × 3)	1 600	264.9 (27.00)		300	150
x)	93 tex × 3 × 3 (840d × 3 × 3)	1 050	392.4 (40.00)		300	150
xi)	111 tex × 1 × 2 (1 000d × 1 × 2)	4 280	117.7 (12.00)		300	150
xii)	111 tex × 2 × 3 (1 000d × 2 × 3)	1 430	353.2 (36.00)		300	190
Tolerance		+5 percent				
Method of Test		TZS 262	TZS 265-1	TZS 265-1		

1) 56 tex × 1 × 2 (500d × 1 × 2) indicates that 2 yarns of 56 tex (500 denier) having twist in one direction (ply) are finally twisted in another direction (cable) to make the final twine. 67 tex × 2 × 3 (600d × 2 × 3) indicates that 2 yarns of 67 tex (600 denier) are twisted in one direction (ply) and such 3 twisted yarns are again twisted in opposite direction (cable) to make the final twine.

2) 1 kgf = 9.81 N.

3) For guidance only.

5 Packaging and marking

5.1 Packaging

Unless otherwise agreed to between the buyer and the seller, the twine shall be packed as follows:

Each spool shall be securely packed in a suitable material to prevent damage during transportation and storage.

5.2 Marking

5.2.1 Each individual spool shall be marked with following information:

- a) name of the material and construction,
- b) Net weight,
- c) Colour
- d) Country of origin
- e) Name and/ or address of the manufacturer
- (f) Month and year of manufacture.

5.2.2 Each package containing spools shall be marked with following information:

- a) Name of the material and construction,
- b) Net weight,
- c) Gross weight,
- d) Country of origin
- e) Name and/ or address of the manufacturer
- f) Month and year of manufacture.

6 Sampling

Sampling shall be conducted in accordance with ISO 2859-1

Annex A

(Normative)

METHOD FOR DETERMINATION OF RUNNAGE

Remove 10 m length from package and weigh to the nearest gram. From the mass compute the length in metre per kilogram. Similarly, determine the mass of the remaining 10 m pieces and compute their length in metre per kilogram.

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