SRI LANKA STANDARD 545 : 1981

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SPECIFICATION FOR POLYAMIDE (NYLON) FISH NET TWINE

BUREAU OF CEYLON STANDARDS

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SLS 545 : 1981

Gr. 4

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Sri Lanka.

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This Standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
SPECIFICATION FOR POLYAMIDE (NYLON) FISH NET TWINE

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Bureau of Ceylon Standards on 1981-11-26, after the draft, finalized by the Drafting Committee on Fishing Nets had been approved by the Textiles Divisional Committee.

This specification will cover only the twines used in the manufacture of gill nets.

All the values given in this specification are in SI units.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value should be the same as that of the specified value in the standard.

In the preparation of this standard the assistance obtained from the publications of the Indian Standards Institution and Malaysian Standards Institute is gratefully acknowledged.

1 SCOPE

This standard prescribes requirements, methods of test and sampling of polyamide (nylon) twines used in the manufacture of gill nets.

2 REFERENCES

ISO	3790	Determination of elongation of netting yarn
CS	102	Presentation of numerical values
CS	155	Designation of netting yarn for fishing nets
SLS	271	Determination of breaking load and knot breaking load of netting yarn for fishing nets
SLS	343	Determination of twist in nylon fish net twine
SLS	428	Random sampling methods

3 DEFINITIONS

For the purpose of this specification, the following definitions shall apply:

3.1 gill nets: Net walls whose lower end is weighted by sinkers and whose upper end is raised above by floats.

3.2 twine: A number of strands of yarn twisted or laid to produce a balanced/twisted structure of continuous length.

4 REQUIREMENTS

4.1 Material

Polyamide (nylon) yarn used in the manufacture of twines shall be of medium tenacity, bright yarn of multifilament type having a minimum tenacity of 495 mN/tex and of approximate count 23 tex (210 d). The number of filaments in the yarn shall be so chosen that the twines comply with the requirements of this specification.

4.2 Construction

The construction of the twine may be as given in Column (2) of Table 1. The method of designation of netting yarns in the tex system is given in CS 155.

4.3 Twist

The twine and its components shall be evenly and uniformly twisted together. The basic yarn may have a nominal holding twist of 10 to 30 turns per metre, and the twist of strands and twine may be as given in Columns (3) and (4) of Table 1.

4.4 Breaking strength (load) and elongation

The breaking strength (load) and elongation of the twine shall comply with the requirements given in Columns (5), (6) and (7) of Table 1, when tested according to the method prescribed in SLS 271. The elongation per cent of the twine shall be calculated by the method given in ISO 3790.

5 PACKING

Twines shall be made into hanks or cheeses as required by the buyer. If required to be packed in hanks, the twines shall be made into hanks of suitable weight and a suitable number of such hanks shall be made into a pack. The cheeses and packs shall be packed in water proof paper or other suitable water proof material as agreed to between the buyer and the seller.

6 MARKING

Cheeses or hanks containing twines shall be marked with the following information:

a) Name of the material;

b) Type;

c) Net mass of package;

d) Year of manufacture;

e) Manufacturer's name, address and/or trade mark, if any; and

f) Batch number.

7 SAMPLING

7.1 Lot

The quantity of nylon fish net twines of the same type and code number delivered to a buyer against a despatch note shall constitute a lot.

7.2 Conformity of a lot to the requirements of this standard shall be determined on the basis of tests carried out on the samples selected from it.

7.3 Unless otherwise agreed to between the buyer and the seller the number of cheeses to be selected at random from a lot shall be as given below.

Lot size	Sample size
Up to 100	03
101 to 300	04
301 to 500	05
501 to 1000	07
1001 and above	10

7.4 The cheeses selected according to **7.3** shall be tested for breaking strength (load) and elongation at break.

7.5 Criteria for conformity

The lot shall be declared as conforming to the requirements of this standard, if the following conditions are satisfied:

a) From the test results of breaking strength (load), the average $\bar{x}$ and the range R are determined and the value of the expression $\bar{x} - 0.4\ R$ does not fall below the minimum value specified.

b) From the test results for elongation at break, the average $\bar{x}$ and the range R shall be determined and the value of the expression $\bar{x} + 0.4\ R$ is less than the specified limit.

TABLE 1 - Particulars of polyamide (nylon) twines for gill nets

Code no.	Construction of twine	Turns per metre*		Breaking strength (load) on 200 mm, test length N, min.		Elongation at break, per cent, max.
		Strand	Twine	Dry	Wet	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	23 tex x 2 x 2 (or 210 d/2/2)	-	-	53	42	
2	23 tex x 2 x 3 (or 210 d/2/3)	560	310	74	59	
3	23 tex x 3 x 3 (or 210 d/3/3	470	280	112	89	
4	23 tex x 4 x 3 (or 210 d/4/3)	420	245	160	128	
5	23 tex x 5 x 3 (or 210 d/5/3)	375	210	185	147	30 per cent
6	23 tex x 6 x 3 (or 210 d/6/3)	350	205	224	179	
7	23 tex x 7 x 3 (or 210 d/7/3)	340	195	279	208	
8	23 tex x 8 x 3 (or 210 d/8/3)	315	185	296	236	
9	23 tex x 9 x 3 (or 210 d/9/3)	310	170	332	265	
12	23 tex x 12 x 3 (or 210 d/12/3	305	155	445	356	
15	23 tex x 15 x 3 (or 210 d/15/3)	270	145	547	438	
18	23 tex x 18 x 3 (or tex d/18/3)	250	135	665	532	35 per cent
20	23 tex x 20 x 3 (or 210 d/20/3)	240	130	742	594	
24	23 tex x 24 x 3 (or 210 d/24/3)	185	100	883	706	

** These values are nominal and for guidance only.*

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The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

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