

BLANK PAGE



भारतीय मानक

वस्त्रादि—मछली पकड़ने के लिए पोलिएमाइड (नाइलन) मोनोफिलामेंट की लाइन—विशिष्टि

(पहला पुनरीक्षण)

Indian Standard

TEXTILES—POLYAMIDE (NYLON) MONOFILAMENT LINE FOR FISHING— SPECIFICATION

(First Revision)

ICS 639.2.081.1:677.718.946.75

© BIS 2003

BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Textile Materials for Marine/Fishing Purposes Sectional Committee had been approved by the Textile Division Council.

This standard was first published in 1975. The revision of this standard has been taken up to incorporate the following changes in the light of experience gained and to bring it in line with current practices:

- a) Additional values of diameter has been included,
- b) Tolerance on mass has been reduced to \pm 5 percent,
- c) Requirement for packing and criteria for conformity have been modified, and
- d) Terminology has been included.

The composition of the Committee responsible for formulation of this standard is given in Annex B.

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 IS 2:1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

TEXTILES—POLYAMIDE (NYLON) MONOFILAMENT LINE FOR FISHING— SPECIFICATION

(First Revision)

1 SCOPE

This standard prescribes the requirements of polyamide (nylon) monofilament line used generally in hook and line fishing.

2 REFERENCES

The following standards contain provisions, which through reference in this text constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

IS No.	Title
1398 : 1982	Packing paper, water proof, bitumen laminated (second revision)
5508 (Part 1): 1969	Guide for fishing gear : Part 1 General
5815	Fishing nets:
(Part 4): 1993	Determination of breaking load and knot breaking load of netting yarn (first revision)
(Part 7): 1993	Determination of elongation of

3 TERMINOLOGY

For the purpose of this standard, the definitions given in 1S 5508 (Part 1) shall apply.

netting yarns (first revision)

4 MANUFACTURE

The materials used in the manufacture shall be virgin polyamide. The tenacity of the monofilament shall be suitable for the purpose for which it is intended (see Table 1). The lines shall not be heat set.

5 REQUIREMENTS

5.1 Polyamide (nylon) monofilament line shall confirm to the requirements specified in Table 1.

5.2 Mass

A tolerance of \pm 5 percent shall be allowed on the declared value of any one package provided that the

variation from the gross specified mass of any delivery to that for the respective code number does not exceed 5 percent.

6 MARKING

- **6.1** The hank or cheeses containing lines shall be labelled furnishing the following information:
 - a) Name of the material,
 - b) Diameter and runnage,
 - c) Net weight of package.
 - d) Month and year of manufactures, and
 - e) Manufacturer's name, initials or trade-mark, if any.

6.2 BIS Certification Marking

The lines may also be marked with the Standard Mark.

6.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 1986 and the Rules and Regulations made thereunder. The details of conditions under which the license for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

7 PACKING

The lines shall be made into hanks or cheeses as required by the buyer. A suitable number of hanks or cheeses shall be placed one over the other and shall be wrapped with a layer of water proof packing material. The pack shall be tied with twine of adequate strength and a suitable number of such packs shall be packed in a container of adequate strength which is previously lined with one layer of waterproof packing paper (see Type 2 of IS 1398). If necessary, the gaps in the container shall be filled with cushioning materials to avoid damage in transit. The container shall be properly secured and bound by iron hoops or wires.

8 SAMPLING AND CRITERIA FOR CONFORMITY

8.1 Lot

The quantity of polyamide (nylon) monofilament lines of the same runnage and construction details delivered

Table 1 Requirements of Polyamide (Nylon) Monofilament Line

(Clauses 4 and 5.1)

SI No.	Nominal Diameter mm	Runnage <i>Max</i> m/kg	Breaking Load <i>Min</i> N(kgf) ¹⁾	Elongation at Break, <i>Max</i> Percent
(1)	(2)	(3)	(4)	(5)
i)	0.16	41 500	13.40 (1.40)	↑
ii)	0.20	26 200	20.00 (2.04)	
iii)	0.24	19 000	30.00 (3.06)	
iv)	0.28	14 000	38.00 (3.88)	
v)	0.30	10 200	45.00 (4.60)	
vi)	0.35	8 500	52.00 (5.30)	
vii)	0.40	6 250	89.00 (9.08)	
viii)	0.50	4 000	134.00 (13.66)	
ix)	0.60	2 800	178.00 (18.16)	60
x)	0.70	2 100	220.00 (20.40)	
xi)	0.80	1 750	280.00 (28.56)	
xii)	0.90	1 350	325.00 (33.15)	
xiii)	1.00	1 100	380.00 (38.76)	
xiv)	1.50	500	550.00 (56.10)	
xv)	2.00	300	900.00 (91.80)	
xvi)	2.50	200	1 300.00 (132.60)	
xvii)	3.00	140	1 800.00 (183.60)	1
thod of		Annex A	IS 5815 (Part 4)	IS 5815 (Part 7)

....

 $^{1)}$ 1 N = 0.102 kgf (approximately).

to a buyer against one despatch note shall constitute a lot.

- **8.2** Conformity of a lot to the requirements of this standard shall be determined on the basis of test carried out on the sample selected from it.
- **8.3** Unless otherwise agreed to between the buyer and the seller, the number of hank or cheese to be selected from a lot shall be as given below:

Lot Size	Sample Size	
(1)	(2)	
Up to 50	3	
51 to 150	5	
151 to 500	8	
501 and above	13	

8.4 The hanks or cheeses selected according to **8.3** shall be tested for length, breaking load and elongation at break.

8.5 Criteria for Conformity

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

- a) From the test results for length and breaking load the average (\bar{x}) , and the range (R) shall be determined and the value of the expression $\bar{x} 0.4 R$ shall 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 expression $\bar{x} + 0.4 R$ shall be less than the specified limit.

ANNEX A

(Table 1)

METHOD FOR DETERMINATION OF RUNNAGE

A-1 TEST SPECIMENS

Remove 10 m length skeins from each of the hank or cheeses constituting the sample under test.

A-2 PROCEDURE

Determine the mass of a skein removed from a hank or cheeses to the nearest gram. From the mass compute the runnage (m/kg).

ANNEX B

(Foreword)

COMMITTEE COMPOSITION

Textile Materials for Marine/Fishing Purposes Sectional Committee, TX 18

Organization

Fisheries Development Commissioner, Ministry of Agriculture, New Delhi

Association of Indian Fishery Industries, New Delhi

Central Institute of Fisheries Nautical & Engineering Training, Ministry of Agriculture, Kochi

Central Institute of Fisheries Technology (ICAR), Cochin

Directorate of Fisheries, Kerala Fisheries Survey of India, Mumbai

Garware Marine Industries Limited, Mumbai

Garware-Wall Ropes Ltd, Pune

Integrated Fisheries Project, Kochi
Office of the Textile Commissioner, Mumbai

Shriram Fibres Limited, Chennai

Tamil Nadu Fisheries Development Corporation Ltd, Chennai The Karnataka Fisheries Development Corporation Ltd, Bangalore The Kerala State Co-operative Federation for Fisheries Development Ltd, Kochi Marine Products Export Development Authority, Kochi

BIS Directorate General

Representative(s)

SHRI M. K. R. NAIR (*Chairman*)
SHRI K. VIJAYA KUMARAN (*Alternate*)

SHRI T. RAGHUNATH REDDY

DR C. P. VERGHESE

SHRI A. C. KUTTAPPAN (Alternate)

Dr B. Meena Kumari

SHRIMATI SALY N. THAMAS (Alternate)

REPRESENTATIVE

Dr V. S. Somvanshi

SHRI M. E. JOHN (Alternate)

Shri R. N. Gandhi

SHRI S. P. PARGAONKAR (Alternate)

SHRIR, M. TELANG

SHRI S. V. RAUT (Alternate)

Dr P. Premalatha

Shri S. P. Kala

SHRI N. S. RAWAT (Alternate)

SHRI A. SHANMUGAVASAN

SHRI V. VIJAYARAGHAVAN (Alternate)

REPRESENTATIVE

REPRESENTATIVE

SHRI P. SURENDRAN

SHRI J. RAMESH

SHRI N. MOHANDAS (Alternate)

SHR! P. BHATNAGAR, Director and Head (TXD) [Representing Director General (Ex-officio)]

Member Secretary
Shri B. L. Bharati
Joint Director (TXD), BIS

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act*, 1986 to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

Amend No.

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Director (Publication), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Catalogue' and 'Standards: Monthly Additions'.

This Indian Standard has been developed from Doc: No. TX 18 (0397).

Amendments Issued Since Publication

Date of Issue

	BUREAU OF INDIAN STANDARDS		
Headquar	ers:		
	navan, 9 Bahadur Shah Zafar Marg, New Delhi 110002 es: 2323 0131, 2323 3375, 2323 9402	Telegrams: Manaksanstha (Common to all offices)	
Regional	Offices:	Telephone	
Central	: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	${2323\ 7617 \atop 2323\ 3841}$	
Eastern	: 1/14 C.I.T. Scheme VII M, V.I.P. Road, Kankurgachi KOLKATA 700054	$ \left\{ \begin{matrix} 2337 \ 8499, 2337 \ 8561 \\ 2337 \ 8626, 2337 \ 9120 \end{matrix} \right. $	
Northern	: SCO 335-336, Sector 34-A, CHANDIGARH 160022	\[\begin{pmatrix} 60 3843 \\ 60 9285 \end{pmatrix}	
Southern	: C.I.T. Campus, IV Cross Road, CHENNAI 600113	{2254 1216, 2254 1442 2254 2519, 2254 2315	
Western	: Manakalaya, E9 MIDC, Marol, Andheri (East) MUMBAI 400093		
Branches	Branches: AHMEDABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE. FARIDABAD.		

GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR. LUCKNOW. NAGPUR. NALAGARH. PATNA. PUNE. RAJKOT. THIRUVANANTHAPURAM. VISAKHAPATNAM.

Text Affected