

SRI LANKA STANDARD 469:1979
UDC 664.951.231

SPECIFICATION FOR
DRIED SHARK FINS

BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR DRIED SHARK FINS

SLS 469 : 1979

(Attached AMD 225)

Gr. 5

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

SRI LANKA STANDARD
SPECIFICATION FOR DRIED
SHARK FINS

FOREWORD

This Sri Lanka Standard Specification has been prepared by the Drafting Committee of the Bureau on Shark Fins. It was approved by the Agricultural and Chemicals Divisional Committee of the Bureau of Ceylon Standards and was authorised for adoption and publication by the Council of the Bureau on 1979-12-21.

This specification makes reference to the following Sri Lanka Standards:

CS 102 Presentation of numerical values.

SLS 428 Random sampling methods.

The posterior dorsal fin, pelvic fins and ventral fin of a shark have not been considered in this specification, because they are comparatively smaller than the other fins and are of less commercial value (see Fig. 1).

The common names of species of sharks referred to in this specification are given in English (E), Sinhala (S) and Tamil (T).

The standard values in this specification are given in SI units.

For the purpose of deciding whether a particular requirement of this specification 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 this specification.

In the preparation of this specification the assistance obtained from the publications of the Indian Standards Institution is gratefully acknowledged.

1 SCOPE

This specification prescribes the requirements and methods of sampling and test for dried shark fins.

2 TERMINOLOGY

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

2.1 **shark fins:** These shall mean fins obtained from the families of sharks given in Appendix E.

2.2 **set:** A set shall include two pectoral fins, one dorsal fin and one caudal (tail) fin.

2.3 **length:** The length of a single dried shark fin in millimetres when measured from tip to mid point of the cut section (see length marked AB in Figs. 2 to 5).

3 TYPES

3.1 The material shall be of the following three types:
Type 1 White fins.

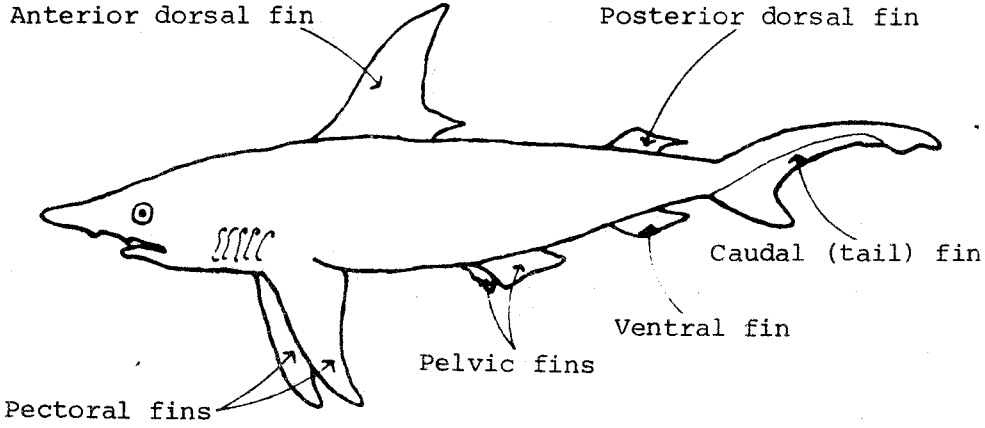


Fig. 1 - Shark

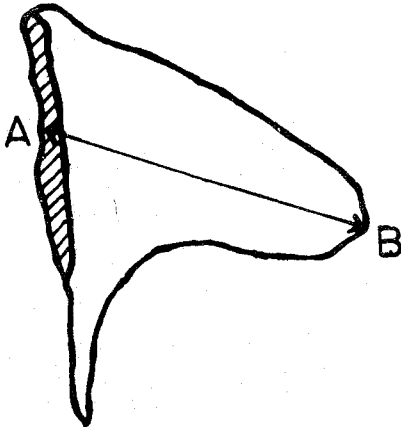


Fig. 2 - Dorsal fin

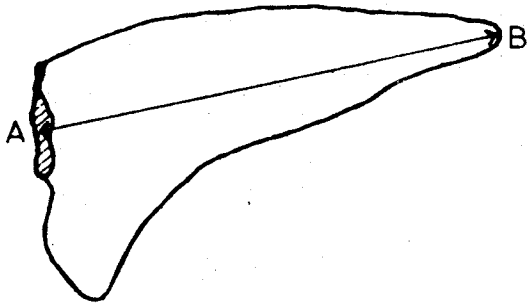


Fig. 3 - Pectoral fin

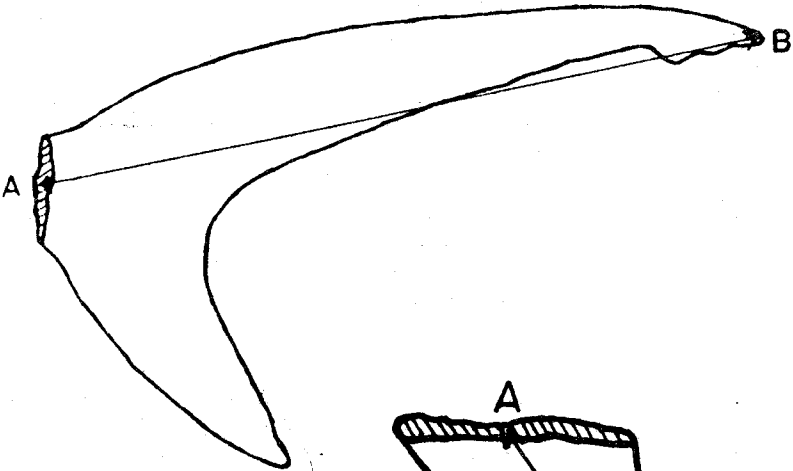


Fig. 4 - White caudal
(tail) fin

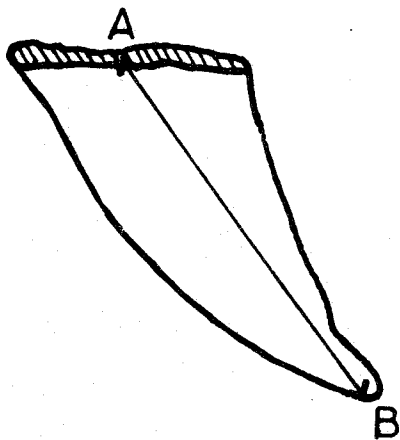


Fig. 5 - Black caudal (tail) fin

Type 2 Black fins

Type 3 'Illuppá' fins

NOTES:

1) For the purpose of this specification, white shall mean yellowish white and black shall mean greyish black (including the spotted varieties).

2) In the case of pectoral fins, the colour of the outer or upper side shall be taken into consideration.

4 GRADES

When examined as prescribed in Appendix B, Type 1 and Type 2 fins (see Figs. 1 to 5) shall conform to the grades specified in 4.1 and 4.2. Type 3 fins shall not be graded; they could consist of an assortment of all sizes.

4.1 Grading according to sets shall be as follows:

a) Grade A_S - The length of pectoral fin in the set shall be 300 mm and above, while the length of the smallest fin in the set shall not be less than 100 mm.

NOTE - At the time of packaging a tolerance of 5 per cent by mass of Grade B_S fins shall be permitted.

b) Grade B_S - The length of a pectoral fin in the set shall be 100 mm and above, but less than 300 mm, while the length of the smallest fin in the set shall not be less than 50 mm.

NOTE - At the time of packaging a tolerance of 5 per cent by mass of Grade A_S fins shall be permitted.

4.2 Grading according to length shall be as given in Table 1.

TABLE 1 - Grading according to length

Sl. No.	Type	Length in mm			
		Grade A _L	Grade B _L	Grade C _L	Grade D _L
(1)	(2)	(3)	(4)	(5)	(6)
1	Type 1 a) Dorsal and pectoral fins b) Caudal (tail) fins	300 and above 400 and above	200 to 299 300 to 399	100 to 199 200 to 299	Below 100 Below 200
2	Type 2 Dorsal, pectoral and caudal (tail) fins	300 and above	200 to 299	100 to 199	Below 100

NOTES:

- 1) At the time of packaging Type 1(a) and Type 2 fins, a tolerance of 5 per cent by mass of the next higher or lower grade or both shall be permitted.
- 2) At the time of packaging Type 1(b) fins, a tolerance of 10 per cent by mass of the next higher or lower grade shall be permitted.

5 REQUIREMENTS

5.1 Preparation

5.1.1 The fins shall be prepared under hygienic conditions.

5.1.2 The dorsal, pectoral or caudal fins of edible sharks shall be used for the preparation of the product.

5.1.3 The fins shall be prepared from fresh sharks. The fins shall be cut as soon as sharks are landed and transported in such a manner that they do not undergo spoilage.

5.1.4 If there is a delay in processing, the fins shall be stored in a cold room maintained at a temperature below 0 °C.

5.1.5 While cutting the fins, avoid as much flesh as possible. Any flesh attached to the cut fins should be removed.

5.1.6 The fins shall be washed with water of potable quality.

5.1.7 The cut portions shall be dipped in wood ash (sand free) and may also be dusted with lime.

5.1.8 The fins shall then be dried in the sun preferably by hanging on poles or ropes or by spreading on mats or by artificial driers till the moisture is reduced to 10 per cent or less.

5.2 Requirements for the finished product

5.2.1 The fins shall be free from fungal, insect and mite infestation.

5.2.2 The fins shall not have salt or lime excrescence on the surface.

5.2.3 The fins shall be free from dirt or any type of chemical contamination other than traces derived from wood ash and lime.

5.2.4 The dried fins shall have the characteristic odour of dried shark meat.

5.2.5 The fins shall also conform to the requirements prescribed in Table 2.

TABLE 2 - Requirements of dried shark fins

Sl. No.	Characteristic	Requirement	Method of test (Ref. to Appendix)
(1)	(2)	(3)	(4)
1	Moisture, per cent by mass, max.	10	C
2	Acid insoluble ash, on moisture free basis, per cent by mass, max.	1.5	D

6 PACKAGING AND MARKING

6.1 Packaging

Fins shall be packed in polythene-lined gunny bags or in any other suitable container as agreed to between the buyer and the seller.

6.1.1 When consisting of sets, each set shall be packed in a suitable container and the sets enclosed within the package specified in 6.1.

6.2 Marking

Each container shall be marked or labelled with the following particulars:

- a) Name, address and/or registered trade mark if any of the seller.
- b) The words "Dried Shark Fins" together with the type and the grade of the material.
- c) Net and gross mass, in kg, of contents.
- d) Date of packaging.
- e) Shipping marks identifying the consignment (if any).
- f) The words "Product of Sri Lanka".

7 SAMPLING

The method of drawing representative samples of the material shall be as prescribed in Appendix A.

8 TESTS

8.1 Tests shall be carried out as prescribed in Appendix B and the relevant appendices specified in Column 4 of Table 2.

8.2 Quality of reagents

Unless specified otherwise chemicals of analytical grade and distilled water shall be employed in tests.

9 CRITERIA FOR CONFORMITY

9.1 A lot shall be considered as conforming to the requirements of this specification if the following conditions are satisfied:

9.1.1 The results of the examination for type, grade and other physical properties specified in 5.2.1 to 5.2.4 satisfy the relevant requirements of this specification.

9.1.2 The test results on the composite sample (formed as specified in A.3.3) satisfy the requirements specified in Table 2.

APPENDIX A

(See 7)

SAMPLING OF DRIED SHARK FINS

A.1 GENERAL REQUIREMENTS

A.1.1 Samples shall be taken in a protected place not exposed to damp air, dust or soot.

A.1.2 The sampling instrument shall be clean and dry.

A.1.3 The samples shall be placed in suitable clean and dry glass or polythene containers. The sample containers shall be of such size that they are almost completely filled by the samples.

A.1.4 Glass containers shall be closed with airtight lids or suitable closures while polythene containers shall be heat sealed. Each container after filling shall be marked with full details of sampling, that is, date of sampling, name of the seller and other important

details of the consignment. It shall then be sealed in such a way that it will not be possible to open or reseal it without detection.

A.1.5 Samples shall be stored in such a manner that there is no deterioration of the material.

A.2 SCALE OF SAMPLING

A.2.1 lot: All the bags in a single consignment of the material belonging to the same type and grade shall constitute a lot.

A.2.1.1, Samples shall be tested from each lot for ascertaining the conformity of the material to the requirements of this specification.

A.2.2 The number of bags to be selected from a lot shall depend on the size of the lot and shall be in accordance with Columns 1 and 2 of Table 3.

TABLE 3 - Scale of sampling

Lot size <i>(N)</i> (1)	No. of bags to be selected for sampling <i>(n)</i> (2)
2 to 25	2
26 to 100	3
101 to 300	5
301 to 500	7
501 and above	9

A.2.3 The bags to be selected from a lot shall be chosen at random and for this purpose a random number table as specified in SLS 428 shall be used.

A.3 PREPARATION OF TEST SAMPLE AND REFERENCE SAMPLE AND NUMBER OF TESTS

A.3.1 Fins graded according to sets

At least four sets shall be withdrawn from different parts of the selected bags. All the fins in each set shall be examined for type. The pectoral fins and smallest fin in each set shall be examined for grade as specified in Appendix B while all fins in each selected set shall be examined for other physical properties as specified in 5.2.1 to 5.2.4.

A.3.2 Fins graded according to length

The material shall be taken out from different parts of the selected bags with the help of a suitable sampling instrument. The material withdrawn from each selected bag which shall consist of at least five per cent of the mass of the contents of a bag shall be examined for type and grade as specified in Appendix B and for other physical properties as specified in 5.2.1 to 5.2.4.

A.3.3 The material selected from each bag which satisfies the requirements for type, grade and description shall be mixed thoroughly to form a composite sample. A suitable quantity of the composite sample thus obtained shall be divided into three equal portions and each portion placed in an airtight container sealed and labelled with all particulars of sampling as given in A.1.4. One portion shall be sent to the testing authority, the second portion delivered to the shipper/exporter and the third portion retained by the sampling authority to be sent to the referee analyst in case of a dispute.

A.3.4 The sample prepared according to A.3.3 shall be tested for moisture and acid insoluble ash.

APPENDIX B

(See 4)

DETERMINATION OF TYPE AND GRADE

B.1 PROCEDURE

B.1.1 Fins graded according to sets

B.1.1.1 Visually determine the type of fins in the sample (see A.3.1).

B.1.1.2 Weigh to the nearest gram the pectoral fins and small fins in the sample under examination (see A.3.1). Measure to the nearest millimetre the length of each pectoral fin and each small fin in this sample.

B.1.1.3 Weigh to the nearest gram the pectoral fins and small fins which do not comply with the requirements for length for a particular grade as specified in 4.1(a) and 4.1(b).

B.1.1.4 Calculate the percentage by mass of fins not complying with the requirements for length of a particular grade.

B.1.2 Fins graded according to length

B.1.2.1 Visually determine the type of fins in the sample (see A.3.2).

B.1.2.2 Weigh to the nearest gram the sample under examination (see A.3.1). Measure to the nearest millimetre the length of each fin in this sample.

B.1.2.3 Weigh to the nearest gram the fins whose lengths do not fall within the range specified in 4.2 for a particular grade.

B.1.2.4 Calculate the percentage by mass of fins whose lengths are not within the specified range for a particular grade.

APPENDIX C

(See Table 2, Item 1)

DETERMINATION OF MOISTURE

C.1 PREPARATION OF SAMPLE FOR ANALYSIS

Cut the fins into small pieces (approximately 10 mm²) and mix thoroughly. Grind about 20 g to 30 g with the help of an electrical or mechanical grinder. The ground material thus obtained shall be mixed properly and kept in an airtight container.

C.2 PROCEDURE

Weigh to the nearest mg, 5 g of the prepared sample (see C.1) into a tared silica or stainless steel dish provided with a lid. Dry the dish in an air oven at 100 ± 1 °C for 6 hours. Cool in a desiccator and weigh. Retain the dried material for the determination of acid insoluble ash (see D.1).

C.3 CALCULATION

Moisture, per cent
by mass = $\frac{\text{Loss in mass, in g, of the sample}}{\text{Mass, in g, of the sample taken}} \times 100$

APPENDIX D
(See Table 2, Item 2)

DETERMINATION OF ACID INSOLUBLE ASH

D.1 PROCEDURE

Weigh to the nearest mg, 2 g of the dried material (see C.2) in a tared silica or platinum dish. Ignite with a Meker burner for about one hour. Complete the ignition by keeping in a muffle furnace at 600 ± 20 °C until grey ash results. Cool and add 25 ml of dilute hydrochloric acid (1:1), cover with a watch-glass and heat on a water-bath for 10 minutes. Cool and filter through a Whatman filter paper No. 42 or its equivalent. Wash the residue with hot water until the washings are free from chlorides as tested with silver nitrate solution and return the filter paper and residue to the dish. Dry the dish and contents in an oven maintained at 135 ± 2 °C for about 3 hours. Ignite it in a muffle furnace at 600 ± 20 °C for one hour. Cool in a desiccator and weigh. Ignite the dish again for 30 minutes, cool and weigh. Repeat this process till the difference between two successive weighings is less than one milligram. Note the lowest mass.

D.2 CALCULATION

$$\text{Acid insoluble ash on moisture free basis, per cent by mass} = \frac{m_2 - m_0}{m_1 - m_0} \times 100$$

where,

m_2 = the lowest mass, in g, of the dish with the acid insoluble ash,

m_0 = mass, in g, of the empty dish, and

m_1 = mass, in g, of the dish with the dried material taken for the test.

APPENDIX E

(See 2.1)

SCIENTIFIC AND COMMON NAMES OF SHARK FAMILIES/SPECIES

E.1 Scientific names and common names of shark families/species from which shark fins are obtained in Sri Lanka are given below.

E.1.1 White fins

These are obtained from the ray *Rhynchobatus djiddensis*, which belongs to the family *Rhinobatidae*. Common names of this species of fish are as follows:

White spotted shovelnose ray, guitar fish (E)
Velava Kiri uluva (S)
Uluvai, Pal uluvai (T)

E.1.2 Black fins

These are obtained from species of the shark genus *Carcharhinus* which belongs to the family *Carcharhinidae*. This group of fish is commonly named as follows:

Shark (E)
Mora (S)
Shura (T)

Black fins are also obtained from species of the hammer-head shark genus *Sphyrna* which belongs to the family *Sphyrnidae*. This group of fish is commonly named as follows:

Hammer-head Shark (E)
Udala Mora (S)
Komben Shura (T)

E.1.3 Illuppa fins

These are obtained from species of saw fish, *Pristis* species which belongs to the family *Pristidae*. Common names of this species of fish are as follows:

Saw fish (E)

Dhathi Mora (S)

Vel Shura, Illuppa (T)

DOC : AMD-SLS 469 : 1979
1995-06-02

AMD ...225:1996

~~DRAFT~~ AMENDMENT NO. 1 TO SLS 469:1979
SPECIFICATION FOR DRIED SHARK FINS

SRI LANKA STANDARDS INSTITUTION

DOC : AMD-SLS 469 : 1979
1995-06-02

AMD 225 : 1996

~~DRAFT~~ AMENDMENT NO. 1 TO SLS 469:1979
SPECIFICATION FOR DRIED SHARK FINS

EXPLANATORY NOTE

The following comments were received while reviewing the standard.

- (1) To state the "lower lobe of caudal fin" rather than stating "caudal fin" in the standard because it is the lower lobe of caudal fin that is being cut, dried and exported and not the whole fin.
- (2) To delete "Clause 5.1.7 - The cut portions shall be dipped in wood ash (sand free) and may also be dusted with lime". This application of wood ash (sand free) or lime to the cut portion of the fin is not a hygienic practice for a food item, though this has been the practice in the industry of the very early stage. But now the processors do not carry out this as its unhygienic. Also if the flesh attached to the cut end of the fin is removed and moisture is reduced to 10 per cent or less by drying, this application is not necessary.
- (3) To introduce other suitable fish species of the class Elasmobranchii.

This amendment is necessitated to upgrade the standard with respect to these three aspects.

AMD225:1996.

Amendment No. 1 approved on.....1996-11-21
to SLS 469:1979
SPECIFICATION FOR DRIED SHARK FINS

PAGE 4

Clause 2.2

Substitute the existing clause with the following:
"2.2 set : A set shall include two pectoral fins, one dorsal fin and
the lower lobe of the caudal (tail) fin."

Clause 2.3

In line 4, delete "5" and substitute "4".

PAGE 5

Fig. 1

Delete the existing Fig. 1 and substitute with the following figure.

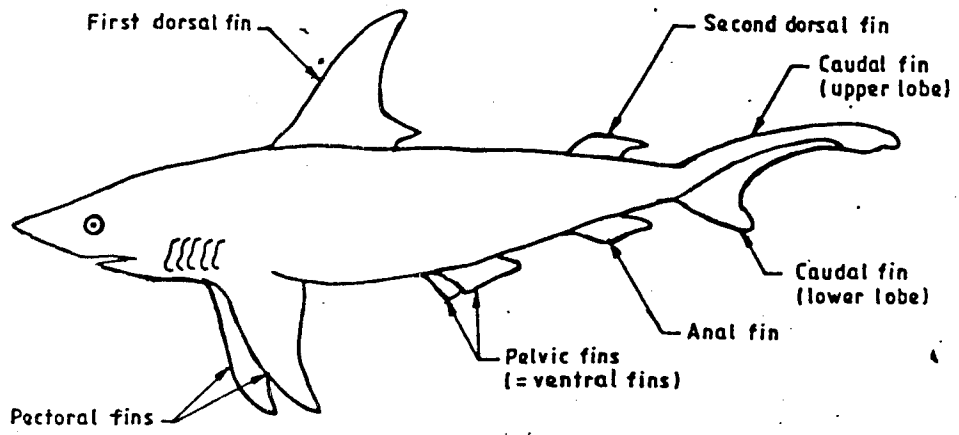


FIGURE 1 - Shark

PAGE 6

Fig. 4

Delete the existing Fig. 4

Fig. 5

Renumber the Fig. 5 as Fig. 4 and substitute the existing figure capture with the following:

"Fig. 4 lower lobe of the white caudal (tail) fin or black caudal (tail) fin".

PAGE 7

Clause 4

In line 2, delete "5" and substitute "4".

PAGE 8

Table 1 - Grading according to length

SL. No. 1, Column 2

Delete the item b) and substitute "b) lower lobe of the caudal (tail) fin".

SL. No. 2, column 2

Reword the existing text as follows "Dorsal, pectoral and lower lobe of the caudal (tail) fins".

PAGE 9

Clause 5.1.2

Substitute the existing clause with the following:

"5.1.2 The dorsal, pectoral or lower lobe of the caudal fins of edible sharks shall be used for the preparation of the product."

Clause 5.1.7

Delete clause 5.1.7 and re-number clause 5.1.8 as clause 5.1.7

PAGE 10

Clause 5.2.2

Delete the words "or lime".

Clause 5.2.3

Delete the words "other than traces derived from wood ash and lime".

PAGE 11

Clause 6.2 item f)

Delete the word "product" and substitute "produce".

PAGE 18

Clause E.1.1 White fins

In line 2, delete the word "*Rhinobatidae*" and substitute "*Rhynchobatidae*".

Insert the following at the end of the text:
"White fins are also obtained from the shark ray genus *Rhina* which belongs to the family *Rhinidae* and the ray genus *Rhinobatos* which belongs to the family *Rhinobatidae*."

Clause E.1.2 Black fins

In line 12, Delete the words "Udala mora" and substitute "Udalu mora".

Insert the following at the end of the text:

"Pectoral and dorsal fins of the thresher shark (E) Kasa mora (S) which belongs to the family *Alopiidae* and the Mako Shark (E), Mee Mora (S) species which belongs to the family *Lamnidae* are also used to obtain the fins."

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SRI LANKA STANDARDS INSTITUTION

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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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