SRI LANKA STANDARD 135 : 2009 UDC 663.951

SPECIFICATION FOR BLACK TEA

(Second Revision)

SRI LANKA STANDARDS INSTITUTION



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SLS 135: 2009

(AMD 421 Attached)

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Sri Lanka Standard SPECIFICATION FOR BLACK TEA (Second Revision)

FOREWORD

This standard was approved by the Sectoral Committee on Agricultural and Food Products and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2009-09-29.

Black tea is a popular beverage consumed all over the world. It is an important commodity in the International trade and Sri Lanka is one of the major black tea producing and exporting countries in the world. Black tea grown and manufactured in Sri Lanka is produced from one garden or from one region or may be a blend of teas from two or more origins.

The desired characteristics of a black tea and the resulting liquor depend on many factors including the type of water to be used for brewing, whether the liquor is to be drunk with or without milk or flavours, and on individual tastes.

This standard was first published in 1972 and subsequently revised in 1979. As a result of the experience gained during these years it has been decided to revise this standard again. Taking into consideration the views of manufacturers, exporters and consumers of black tea, the National/ Technical Committee on Tea which responsible for the preparation of this standard felt that it should be related to the international practice, which led the Committee to base this standard on ISO 3720 – Black Tea, definition and basic requirements, issued by the International Organization for Standardization (ISO).

The objectives of this standard are to specify the plant source from which black tea is to be manufactured and to set requirements for certain chemical characteristics which, if met, are an indication that the tea has been subjected to recognized good production practice. However, for commercial purpose and to save time and expenses, black tea is also assessed for quality by tea tasters, who from their previous experience can assess whether a given black tea would meet the requirements of the standard or not.

This standard is subject to the restrictions imposed under the Sri Lanka Food Act No. 26 of 1980, Sri Lanka Tea Board Law, No. 14 of 1975 and the regulations framed thereunder, wherever applicable.

This standard contains Clause 4.3, which subject to an agreement between the purchaser and the supplier at the time of placing orders.

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

In revising this standard, the assistance derived from publications of the International Organization for Standardization (ISO) is gratefully acknowledged.

1 SCOPE

- **1.1** This specification prescribes the requirements, methods of sampling and test for black tea.
- 1.2 This specification is not applicable to decaffeinated black tea.

2 REFERENCES

- SLS 28 Methods for analysis of tea
 - Part 1: Preparation of ground sample of known dry matter content
 - Part 2: Determination of loss in mass at 103 °C
 - Part 3: Determination of total ash
 - Part 4: Determination of water-soluble ash and water-insoluble ash
 - Part 5: Determination of acid insoluble ash
 - Part 6: Determination of alkalinity of water-soluble ash
 - Part 7: Determination of water extract
 - Part 8: Determination of crude fibre content
- SLS 71 Glossary of tea terms
- SLS 77 Tea sampling
- SLS 78 Tea method for preparation of liquor for use in sensory testing
- SLS 102 Rules for rounding off numerical values
- SLS 143 Code of practice for general principles of food hygiene
- SLS 467 Code of practice for labelling of prepackaged foods
- SLS 1315 Code of practice for tea industry

3 PRODUCT DEFINITION

For the purpose of this specification the following definition shall apply:

3.1 black tea: Tea derived solely and exclusively, and produced by acceptable processes, notably withering, leaf maceration, aeration and drying, from the tender shoots of varieties of the species *Camellia sinensis* (Linnaeus) O. Kuntze, known to be suitable for making tea for consumption as a beverage.

4 REQUIREMENTS

4.1 General requirements

- **4.1.1** The product shall be cultivated, harvested, processed, packaged, stored and transported under hygienic conditions as prescribed in **SLS 143** and **SLS 1315**.
- **4.1.2** Black tea shall have no taint and shall be free from extraneous matter, added colouring matter and non-permitted flavours.

NOTE: Liquor for assessment of taint shall be prepared by the method described in SLS 78. The assessment shall be described in the test report using terms defined in SLS 71.

4.1.3 Black tea shall be free from insect infestation and fungal growth.

4.2 Chemical requirements

4.2.1 The product shall comply with the requirements given in Table 1, (in which all the requirements given are expressed on the basis of the material oven-dried at 103 ± 2 °C by the method described in **SLS 28 : Part 1**) when tested according to the methods given in Column 4 of the Table.

NOTE: No limit is specified for the moisture content of the black tea. If desired, the actual loss in mass at 103 ± 2 °C of the sample as received may be determined and the result recorded in the test report. In such cases, the determination shall be carried out by the method described in SLS 28: Part 2.

TABLE 1 – Chemical requirements for black tea

| SI | Characteristic | Requirement | Method of test |
|---------|--|--------------|-----------------|
| No. (1) | (2) | (3) | (4) |
| i) | Water extract, per cent by mass, (min.) | 32.0 | SLS 28 : Part 7 |
| ii) | Total ash, per cent by mass | 4.0 to 8.0 | SLS 28 : Part 3 |
| iii) | Water-soluble ash of total ash, per cent by mass, (min.) | 45 | SLS 28 : Part 4 |
| iv) | Alkalinity of water-soluble ash (as KOH), per cent by mass | 1.0 to 3.0 * | SLS 28 : Part 6 |
| v) | Acid-insoluble ash, per cent by mass, (max.) | 1.0 | SLS 28 : Part 5 |
| vi) | Crude fibre, per cent by mass (max.) | 16.5 | SLS 28 : Part 8 |

^{*} When the alkalinity of water-soluble ash is expressed in terms of millimoles of KOH per 100 g of ground sample, the limit shall be 17.8 to 53.6.

4.3 Contaminants

4.3.1 Pesticide residues

The product shall be cultivated, harvested and processed with special care under Good Agricultural Practices and Good Manufacturing Practices, so that residues of those pesticides which may be required in any stage of process do not remain, or, if practically unavoidable, are reduced to the maximum extent possible.

4.3.2 Other contaminants

The product shall not contain contaminants or undesirable substances in amounts which may represent a hazard to the health of the consumer.

5 PACKAGING

The product shall be packaged in closed, clean and dry containers / packages made of material, which does not affect the black tea, or in accordance with the customary trade practices so as to allow the black tea to retain its freshness.

6 MARKING AND / OR LABELLING

- **6.1** Each package shall be marked or labelled legibly and indelibly or a label shall be attached to the package with the following information, except for packages intended for export where marking shall be in accordance with **6.2**.
- a) Name of the product as "Black Tea";
- b) Brand name or trade name, if any;
- c) Net mass, in "g" or "kg";
- d) The batch or code number or a decipherable code marking;
- e) Name and address of the manufacturer and the packer or the distributor in Sri Lanka;
- f) Date of manufacture;
- g) Date of expiry;
- h) Declaration if flavours and flavouring substances are added; and
- j) Country of origin, in case of imported products.
- **6.2** The following information shall be marked on packages intended for export :
- a) Name of the product;
- b) Net and gross mass;
- c) The words "Produce of Sri Lanka / Ceylon";
- d) Markings to identify the exporter;
- e) Serial number of the package in the consignment;
- f) Destination; and
- g) Any other information requested by the buyer /importing country.
- 6.3 The marking and labelling shall also be in accordance with SLS 467.

7 SAMPLING

- 7.1 Sampling shall be carried out in accordance with SLS 77.
- 7.2 The ground sample of the material shall be prepared in accordance with SLS 28: Part 1 before undertaking the analysis for chemical characteristics.

7.3 Number of tests

- **7.3.1** Each package selected as in Clause **5.1** of **SLS 77** shall be examined for packaging and marking requirements.
- **7.3.2** The contents of each package selected as in Clause **5.1** of **SLS 77** shall be inspected for requirements given in **4.1.2** and **4.1.3**.
- 7.3.3 The packages selected as in Clause 5.1 of SLS 77 and the composite sample prepared as in SLS 28: Part 1 shall be tested for the requirements given in 4.2.

8 METHODS OF TEST

Tests shall be carried out as prescribed in Parts 1 to 8 of SLS 28 and in SLS 78.

9 CRITERIA FOR CONFORMITY

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

- **9.1** Each package examined as in **7.3.1** satisfies the packaging and marking requirements.
- 9.2 Each package inspected as in 7.3.2 satisfies the requirements given in 4.1.2 and 4.1.3.
- 9.3 The composite sample tested as in 7.3.3 satisfies the requirements given in 4.2.



Amendment No: 1 Approved on 2011-10-27 to SLS 135: 2009

AMENDMENT NO: 1 TO SLS 135: 2009 SPECIFICATION FOR BLACK TEA (SECOND REVISION)

EXPLANATORY NOTE

This amendment is issued to incorporate total polyphenol content as a chemical requirement and also to be inline with the ISO 3720:2011-Black tea standard.

Amendment No: 1 Approved on 2011-10-27 to SLS 135: 2009

AMENDMENT NO: 1 TO SLS 135: 2009 SPECIFICATION FOR BLACK TEA (SECOND REVISION)

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Clause 2 **REFERENCES**

Include the following at appropriate place:

SLS 28 Part 9 : Determination of substances characteristic of Green and Black tea **Section 1** – Content of total polyphenols in tea.

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Table 1 – Chemical requirements for black tea

Include the following at appropriate place:

| SI No. (1) | Characteristic (2) | Requirement (3) | Method of test (4) |
|------------|--|-----------------|---------------------------|
| vii) | Total polyphenols, per cent by mass (min.) | 9.0 | SLS 28 Part 9 / Section 1 |

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Clause 8 METHODS OF TEST

Include the following at appropriate place:

Part 9 / Section 1 of SLS 28

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI which includes surveillance inspection of the factory, testing of both factory and market samples.

Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



SRI LANKA STANDARDS INSTITUTION

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