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PAKISTAN STANDARD SPECIFICATION
FOR

BLACK TEA (2ND REVISION)

PAKISTAN STANDARDS AND QUALITY CONTROL AUTHORITY
Standards Development Centre,
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PAKISTAN STANDARD SPECIFICATION FOR BLACK TEA (2ND Revision)

0. FOREWORD

0.1 This Pakistan Standard specification was adopted by the Pakistan Standards & Quality Control Authority; Standards Development Centre on **22nd Feb, 2012** after the draft finalized by the Tea Technical Committee had been approved by the National Standards committee for Agriculture & Food products.

0.2 In preparation of this standard the views of the producers, consumers, technologists and testing authorities have been taken into consideration.

0.3 This standard was established in 1965 & first revised in 2000 now technical Committee felt it necessary to revise the existing specification in the light of the latest developments in the Industries.

0.4 This standard applies to processed leaves, buds and tender stalk of the distinct varieties of Camellia sinensis belonging to the genus camellia prepared by the usual trade practice, but excludes tea waste.

0.5 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 PS: 103 for Methods of rounding off Numerical values, the number of significant places retained in the rounded off value shall be the same as that of the specified value in the standard.

0.6 This standard is intended chiefly to cover the technical provisions relating to tea and it does not include all the necessary previsions of a contract.

1. SCOPE

This Pakistan Standard specifies the parts of a named plant that are soluble for making black tea for consumption as a beverage and the chemical requirements for black tea that are used to indicate that tea from that source has been produced accordance with good production practice.

2. TERMINOLOGY

BLACK TEA

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

2.2 TEA WASTE

Tea waste is the fine fluff of light or dark color, which produced from plucked tea leaves in course of manufacture.

3. SAMPLING

In sampling, the sampling instruments and the container for samples shall be clean, dry and free from adventitious contamination.

3.1 The sample container shall be sealed air-tight after filling and marked with full detail of sampling date of sampling any batch or code number and any other important particulars of the consignment.

3.2 Samples shall be drawn from the cube root of containers of each batch of the material. Sample from each selected container shall be not less than 0.5 kg.

3.3 Test samples in three shall be prepared from such samples (see clause 3.4) by transferring 1.0 kg to 1.5 kg of the material which, if necessary, should be ground to pass through No.30 sieve and kept in thoroughly dried tin or glass container and sealed air-tight. The test sample shall be labeled with all the particulars of sampling as given in clause 3.3

3.4 One set of test sample shall be sent to the purchaser and one to the vendor and the third set bearing the seals of the purchaser and the vendor or any other authority as detailed by the PSQCA shall constitute the refer sample to be used in case of dispute. It shall be kept at place agreed to between the purchaser and the vendor or as desired by any authority detailed by the PSQCA for this purpose.

4. CHEMICAL REQUIREMENTS

The material shall conform to the requirements prescribed in the Table-1

4.1 The tea shall comply with the requirements specified in Table 1 in which all the figures given are expressed on the basis of the materials oven dried at (103±2)°C by the method specific in ISO: 1573.

4.2 No limit specified for "moisture" content of the tea as received of desired the actual loss in mass at 103°C of the sample as received may be determined and the results recorded in the test report. In such cases the determination shall be carried out by the method specified in ISO: 1573.

Table – 1

Chemical Requirements for Black Tea

Characteristic	Requirement	Method of test
Water extract % mass fraction	32 min.	ISO 9768
Total Ash, %, mass fraction	8 max. 4 min.	ISO 1575
Water Soluble Ash, % mass fraction of Total Ash	45 min	ISO 1576
Alkalinity of Water- Soluble Ash (as KOH), % mass fraction	1,0[a] min. 3,0[a] max.	ISO 1578
Acid-insoluble Ash, % mass fraction	1,0 max.	ISO 1577
Crude Fibre, % mass fraction	16,5 max.	ISO 5498 for ISO 15598[b]
Total Polyphenols, % mass fraction	9 min.	ISO 14502-1

a. When the alkalinity of water soluble ash is expressed in terms of milli moles of KOH per 100 g of ground sample, the limit shall be : 17, 8 min. ; 53,6 max.

b. The specific method for the determination of crude fibre in tea is specified in ISO 15598, however for the purpose of routine estimation; the general method specified in ISO 5498 is adequate. In case of dispute, the method of determination should always be that specified in ISO 15598. The requirement of 16,5 % mass fraction remains unchanged regardless of the method used.

5. TESTS

5.1 The relevant testing methods of ISO, CAC and of other internationally recognized standard methods may be taken in to account for analysis purpose.

6. PACKING AND MARKING

Tea packing shall be packed in closed clean and dry containers made from Food Grade material which does not effect the quality of Tea suitably and clearly marked to give the following information:-

a. Name and address of the Processor/Packer.
b. Name of the Product and brand name if any;
c. Batch or code number;
d. Net weight in gram or kg.
e. Date of process & expiry.
f. Pakistan standard number, PS mark & license number.

APPENDIX – A
(Clause 2.1)

A-0 DETERMINATION OF UNFERMENTED MATERIALS

A-1 Procedure:

A-1.1 Spread 5 g of dry sample on a plastic or glass sheet and pick out the unfermented materials, if any, by forceps. Weigh the unfermented materials and express the result in percentage on oven dry basis.

$1,0^{a}$ min. $3,0^{a}$ max.