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### भारतीय मानक

चूरा किस्म की चबाने वाली तम्बाकू (जर्दा) — विशिष्टि (दूसरा पुनरीक्षण)

Indian Standard

# FLAKE TYPE CHEWING TOBACCO (ZARDA) — SPECIFICATION

(Second Revision)

UDC 663.972

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110 002

## AMENDMENT NO. 1 OCTOBER 2000 TO

# IS 2344: 1994 FLAKE TYPE CHEWING TOBACCO (ZARDA) — SPECIFICATION

(Second Revision)

( Page 1, clause 2 ) — Insert reference to 'IS 9379: 1999 Method for determination of moisture (second revision)' at the appropriate place.

(Page 1, Table 1) — Substitute the following table for the existing:

TABLE 1 REQUIREMENTS FOR FLAKE TYPE CHEWING TOBACCO (ZARDA)

(Clause 3.6)

SI No.	Characteristics	Requirement	Method of Test Reference
(1)	(2)	(3)	(4)
i)	Moisture content, percent by mass, Max	15.0	IS 9379
ii)	Nicotin (on dry basis), percent by mass, Max	4.0	7 of IS 5643
iii)	Total ash (on dry basis), percent by mass, Max	28.0	9 of IS 5643
iv)	Acid insoluble ash (on dry basis) percent by mass, Max	4.0	10 of IS 5643

(FAD4)

#### Tobacco and Tobacco Products Sectional Committee, FAD 4

#### **FOREWORD**

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Tobacco and Tobacco Products Sectional Committee had been approved by the Food and Agriculture Division Council.

A number of brands of chewing tobacco (ZARDA) are manufactured in the country depending upon the leaf tobacco used, the processing technique employed and the admixture of various ingredients used. The range of brands of ZARDA produced in the country is very wide and it was felt necessary to formulate an Indian Standard. The broad objective of this standard is not only to enable the Indian consumer to get a product of assured quality, but also to help in promoting export of this product.

This standard was published in 1963 and was first revised in 1973. The second revision is being brought out to update its provisions in the light of technological development, experience gained and the practices being followed in the trade.

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

# FLAKE TYPE CHEWING TOBACCO (ZARDA) — SPECIFICATION

### (Second Revision)

#### 1 SCOPE

This standard prescribes the requirements, method of sampling and test for flake type chewing tobacco (ZARDA).

#### 2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

IS No.	Title
1070 : 1992	Reagent grade water (third revision)
3110 : 1982	Silver leaf (first revision)
4905 : 1968	Methods for randon sampling
5643 : 1989	Methods of test for tobacco in tobacco products (first revision)

#### **3 REQUIREMENTS**

#### 3.1 Description

Flake type chewing tobacco (ZARDA) shall be prepared from mould-free tobacco lamina in the form of dry flake. It may be coloured and perfumed.

#### 3.2 Freedom from Mould Attack

The material shall be free from any mould attack when examined by the method prescribed in 6 of IS 5643: 1989.

#### 3.3 Silver Foils (Leaf)

Silver foils (leaf) when used shall conform to IS 3110: 1982.

#### 3.4 Harmful Substances

The material shall not contain any harmful substances.

#### 3.5 Additives

Any substances, if added, shall be of nature and purity which are suitable for use as food additives as permitted under *Prevention of Food Adulteration Rules*, 1955.

3.6 The material shall also conform to the requirements prescribed in Table 1.

#### 4 PACKING

The material shall be packed in permitted film or laminated pouches, glass or tin-plate containers, with a tamper-proof seal. These containers may then be packed in bulk container as agreed to between the purchaser and the manufacturer.

#### 5 MARKING

- 5.1 Each packet of chewing tobacco shall be legibly and indelibly marked with the following:
  - a) Description of contents;
  - b) Name of the manufacturer;
  - c) Trade-name or brand name;

Table 1 Requirements for Flake Type Chewing Tobacco (ZARDA) (Clauses 3.6, 7.1 and A-5.1)

SI No.	Characteristic	Requirement	Method of Test (Ref to Cl of
	•		IS 5643 : 1989)
(1)	(2)	(3)	(4)
i)	Moisture content, percent by mass, Max	15.0	5
ii)	Nicotine (on dry basis), percent by mass, Max	4.0	7
iii)	Total ash (on dry basis), percent by mass, Max	28.0	9
iv)	Acid insoluble ash (on dry basis), percent by mass, Max	4.0	10

- d) Net mass of content;
- e) Date of manufacture or date code;
- f) Colour of wrapper; and
- g) Any other statutory information.

#### 5.2 BIS Certification Mark

The product may also be marked with the Standard Mark.

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

#### 6 SAMPLING

Drawal of representative samples of the material and the criteria for conformity shall be as prescribed in Annex A.

#### 7 TESTS

7.1 Tests shall be carried out as prescribed in 3.2, 3.3 and col 4 of Table 1.

#### 7.2 Quality of Reagents

Unless specified otherwise, pure chemicals and reagent grade water (see IS 1070: 1992) shall be employed in tests.

NOTE— 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

#### ANNEX A

(Clause 6)

#### SAMPLING OF FLAKE TYPE CHEWING TOBACCO (ZARDA)

### A-1 GENERAL REQUIREMENTS OF SAMPLING

- A-1.0 In drawing, preparing, storing and handling samples, the following precautions and directions given in A-1.1 to A-1.4 shall be observed.
- A-1.1 Precautions shall be taken to draw the samples so as to protect the sample, the material being sampled and the receptacles for samples from loss or gain of moisture and from adventitious contamination.
- A-1.2 The samples shall be placed in clean and dry receptacles. The receptacles shall be sealed airtight after filling and marked with full details of sampling, date of manufacture, name of the manufacturer and other important particulars of the consignment.
- A-1.3 Sample shall be stored in such a manner that the conditions of storage do not unduly effect the quality of the material.
- A-1.4 Sampling shall be done by a person agreed to between the purchaser and the vendor and in the presence of the purchaser or his representative and the vendor (or his representative).

#### A-2 SCALE OF SAMPLING

A-2.1 All the bulk containers in a single consignment of the material pertaining to the same brands shall constitute a lot. If the consignment is declared to consist of different brands, the bulk containers belonging to the same brand shall be grouped together to constitute a lot.

- A-2.1.1 Samples shall be tested for each lot for ascertaining conformity of the materials to the requirements of this specification.
- A-2.2 The number of bulk containers to be selected from the lot shall depend on the size of the lot and shall be in accordance with Table 2.

Table 2 Number of Bulk Containers to be Selected for Sampling (Clause A-2.2)

Lot Size	Number of Bulk Containers
	to be Selected
(N)	(n)
( <i>N</i> ) (1)	(2)
Below 5	2
6 to 10	3
Over 10	4

- A-2.3 These bulk containers shall be chosen at random and for this purpose some random number tables as agreed to between the purchaser and the vendor shall be used (see IS 4905: 1968). In case such a table is not available, the following procedure shall be adopted:
- A-2.3.1 Arrange all the bulk containers in the lot in one order and count them 1, 2, 3....., up to r and so on, every rth bulk container thus counted shall be withdrawn to give a sample for test, where r = N/n (see Table 2). If r comes to be a fractional number, its value shall be taken as equal to the integral part of it.

#### A-3 PREPARATION OF SAMPLES

#### A-3.1 Individual Samples

The number of packets to be taken at random from each selected bulk container shall be sufficient so as to give about 100 g of the material. The material so taken out shall be mixed together; 60 g of the same shall be taken and then divided into three equal parts of 20 g each. Each part shall constitute an individual sample representing the bulk container and shall be transferred immediately to thoroughly clean and dry receptacles and sealed air-tight. The receptacles shall be labelled with the particulars given under A-1.2.

A-3.1.1 The individual samples so obtained from the lot shall be divided into three sets in such a way that every set has an individual sample representing each selected bulk container. One of these sets shall be marked for the purchaser, another for the vendor and the third as the referee and all the three sets shall bear the seals of the purchaser and the vendor.

#### A-3.2 Composite Sample

From the portion of the material left over after preparing the individual sample (see A-3.1), equal quantities of material shall be taken for each selected container and well mixed together to form a composite sample of about 120 g for the lot.

A-3.2.1 The composite sample shall be divided into three equal parts, one for the purchaser, another for the vendor and the third for the referee and all the three samples shall bear the seals of the purchaser and the vendor.

#### A-3.3 Referee Sample

Referee sample shall consist of a set of individual samples (see A-3.1) and a composite sample (see A-3.2) marked for this purpose and shall bear the seals of the purchaser and the vendor. These shall be kept at a place agreed to between the two.

#### **A-4 NUMBER OF TESTS**

A-4.1 Tests for the determination of moisture content, nicotine shall be conducted on each of the individual sample (see A-3.1).

A-4.2 Tests for the determination of the remaining characteristics shall be conducted on the composite sample (see A-3.2).

#### A-5 CRITERIA OF CONFORMITY

A-5.1 A lot shall be declared as conforming to the specification when:

- a) each of the test results for moisture content, nicotine satisfies the corresponding requirement specified in Table 1. If, however, one or more test results do not satisfy the respective requirement, the conformity of the lot shall be ascertained in accordance with A-5.1.1.
- b) the test results on the composite samples for the remaining requirements shall satisfy the corresponding requirements as given in 3 and Table 1.
- A-5.1.1 In case one or more of the test results do not satisfy the requirements for moisture content, nicotine, the following procedure shall be adopted for determining conformity of the material in respect of these characteristics.

The mean and the range of the corresponding test results shall be calculated as:

Mean (X) = Sum of the test results

Number of the test results

Range (R) = Difference between the maximum and the minimum test results

The appropriate expression as shown in col 6 of Table 3 shall be calculated. If the values of these expressions satisfy the relevant condition as given in col 6 of Table 3, the lot shall be deemed to have satisfied the requirements for mositure content, and nicotine.

Table 3 Criteria for Conformity

SI No.	Characteristic	Test Results 1, 2, 3,,n	Average	Range	Criterion for Conformity
(1)	(2)	(3)	(4)	(5)	(6)
i)	Moisture content, percent by mass	-	<b>X</b> 1	$R_1$	$X_1 + 0.4 R_1 < 15.0$
ii)	Nicotine, percent by mass	-	<b>X</b> 2	R <sub>2</sub>	$X_2 + 0.4$ $R_2 < 4.0$

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#### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

#### BUREAU OF INDIAN STANDARDS

#### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002	
Telephones: 331 01 31, 331 13 75	Telegrams: Manaksanstha

actophones : 351 01 51, 551 10 to	(Common to all Offices)
Regional Offices:	Telephones
Central: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{ 331 01 31 331 13 75
Eastern: 1/14 C.I.T. Scheme VII M, V.I.P. Road, Maniktola CALCUTTA 700054	{ 37 84 99, 37 85 61 37 86 26, 37 86 62
Northern: SCO 445-446, Sector 35-C, CHANDIGARH 160036	<pre>53 38 43, 53 16 40 53 23 84</pre>
Southern: C.I.T. Campus, IV Cross Road, MADRAS 600113	{ 235 02 16, 235 04 42 235 15 19, 235 23 15
Western: Manakalaya, E9 MIDC, Marol, Andheri (East) BOMBAY 430093	{ 632 92 95, 632 78 58 632 78 91, 632 78 92

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