भारतीय मानक Indian Standard IS 4074 : 2019

मानसून्ड कॉफी की ग्रेडिंग – विशिष्टि

(तीसरा पुनरीक्षण)

Grading for Monsooned Coffee — **Specification**

(Third Revision)

ICS 65.120

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भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS मानक भवन, 9 बहादुरशाह ज़फर मार्ग, नई दिल्ली-110002 मानकः पथप्रदर्शकः – MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI-110002 www.bis.gov.in www.standardsbis.in

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Stimulant Foods Sectional Committee, FAD 06

FOREWORD

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

Considerable quantities of monsooned coffee are exported from India. Monsooned coffee is prepared from clean garbled cherry coffee to absorb moisture from humid atmosphere and by equalizing moisture at intervals by suitable bulking and rebagging operations. The above operations are usually carried out during monsoon season in the Malabar Coast. The coffee beans absorb moisture in stages, swells up to nearly double the size, and colour changes to pale yellow/straw colour. The process consists of exposing cherry coffee in layers of 10 to 15 cm thickness to damp atmosphere in a well ventilated cemented brick floored godowns during monsoon season. The coffee beans are raked from time to time followed by bulking and rebagging at intervals. The process is completed in about 12 to 16 weeks. After monsooning, the coffee is sized, when necessary; subsequently, it is garbled, bagged and fumigated to prevent infestation, and then marketed.

This standard was first published in 1967 and first revised in 1975 where the range of moisture content was revised as 13 to 14.5 percent from 13 to 16 percent in the earlier standard. In the second revision in 1981, the section on terminology was aligned with ISO/DIS 3509 'Coffee and its products — Vocabulary'. In this third revision the grade designations of monsooned coffee have been modified to align with the specifications under Geographical Indicator (GI) registration for Monsooned Malabar Arabica coffee and Monsooned Malabar Robusta coffee and other editorial improvements.

In the formulation of this standard, due consideration has been given to the *Legal Metrology (Packaged Commodities) Rules*, 2011 and *Food Safety and Standards Act*, 2006 and Rules framed thereunder. The standard is however, subject to restrictions imposed under these rules, wherever applicable.

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 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 values shall be the same as that of the specified values in this standard.

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Indian Standard GRADING FOR MONSOONED COFFEE — SPECIFICATION

(Third Revision)

1 SCOPE

This standard prescribes the requirements and methods of test for monsooned coffee, *Coffea arabica* and *Coffea canephora* (subvariety *C. robusta Linn*).

2 REFERENCE

The following standard contains provisions, which through reference in this text, constitute provision of this standard. At the time of publication, the edition indicated was 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 3581 : 1982 Green coffee — Specification (second revision)

3 TERMINOLOGY

For the purpose of this standard, the following definitions shall apply.

3.1 Monsooned Coffee — Monsooned coffees are prepared from cherry (unwashed) coffee which has been subjected to humid atmosphere to absorb moisture during which it swells and colour changes to pale yellow/straw white.

3.2 Foreign Matter — Mineral, animal or vegetable matter not originating from the coffee cherry.

3.3 Insect Damaged Bean — Coffee bean damaged internally or externally by insect attack.

3.4 Insect Infested Bean

3.4.1 *Live Insect Infested Bean* — *Coffee* bean harbouring one or more live insects at any stage of development.

3.4.2 Dead Insect Infested Bean — Coffee bean containing one or more dead insect or insects' fragments.

3.5 Triage — The triage includes broken, withered spotted, elephant, small beans, malformed, pales and pulper-cuts either in flats or in pea-berries. Triage shall

be free from blacks, browns, stinkers and sours, and shall also be free from imperfectly monsooned beans to an extent not greater than the tolerance as indicated in the Table 1.

3.6 Imperfectly Monsooned Beans — Beans not properly monsooned and still retaining some characteristic of the corresponding green coffee.

3.7 Bad Smelling Beans — Beans having bad, musty or foreign smell when the sample is sniffed.

3.8 Blacks/Browns — More than a quarter of the bean surface black, blue brown or similarly discoloured beans and includes stinker and sour beans.

3.9 Bits — Broken coffee of less than one-third of the beans in size.

4 TYPES AND GRADES

4.1 There shall be mainly two types of monsooned coffee as given below:

- a) *Type 1* Monsooned Malabar Arabica Coffee, and
- b) *Type 2* Monsooned Malabar Robusta Coffee.

4.2 There shall be 6 grades of monsooned Malabar Coffee as given below:

- a) Monsooned Malabar AAA,
- b) Monsooned Malabar AA,
- c) Monsooned Malabar A,
- d) Monsooned Malabar Arabica Triage,
- e) Monsooned Malabar Robusta AA, and
- f) Monsooned Malabar Robusta Triage.

4.3 Monsooned Malabar coffee beans shall be graded on the basis of size and shape before packing.

4.4 The designation of grades and their requirements shall be as given in Table 1.

5 REQUIREMENTS

5.1 Moisture Content

The moisture content of monsooned coffee, when

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SI	Туре	Grade Designation	Sieving Requirement		Garbling Standard
No.			Aperture Size mm	Percent by Mass Retained	[Permissible Percent of Triage (T)/BBB ¹⁾]
(1)	(2)	(3)	(4)	(5)	(6)
i)	Type 1	Monsooned Malabar AAA	7.50	90	2% of T
	• •	Monsooned Malabar AA	7.10	90	2% of T
		Monsooned Malabar A	6.70	75	3% of T
		Monsooned Malabar Arabica Triage	6.00	90	3% of BBB
ii)	Type 2	Monsooned Malabar Robusta AA	7.10	90	3% of T
	• •	Monsooned Malabar Robusta Triage	6.00	90	3% of BBB

Table 1 Grade Designation of Monsooned Coffee and their Requirements

(Clauses 3.5 and 4.4)

¹⁾ Black/Brown/Bits (see 3.8 and 3.9)

determined according to the method prescribed in Appendix A of IS 3581, shall be between 13 and 14.5 percent by mass at the time of clearance of coffee from pool warehouses.

5.2 On visual examination, the total defects shall not exceed the limits prescribed for various grades as shown in Table 1. The total defects as described in **3.2** to **3.9** in Monsooned Malabar AA shall be not more than 2 percent by mass and in Monsooned Malabar Robusta AA shall be not more than 3 percent by mass.

6 PACKING AND MARKING

6.1 Packing

The monsooned coffee beans shall be packed in new, clean and sound jute bags or any other suitable container as agreed to between the purchaser and the vendor. The bags shall be free from any fungal or insect infestation and shall be free from any undesirable smell.

6.2 Marking

6.2.1 The following particulars shall be marked legibly or labelled on each bag or container:

- a) Name of the material;
- b) Type and grade;
- c) Name and address of vendor;
- d) Net quantity, in kg; and
- e) Any other requirements as given under the Legal Metrology (Packaged Commodities) Rules, 2011 and the Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.

6.2.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under provisions of the *Bureau* of Indian Standards Act, 2016 and the Rules and Regulations framed thereunder, and the product(s) may be marked with the Standard Mark.

Bureau of Indian Standards

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This Indian Standard has been developed from Doc No.: FAD 06 (2222).

Amendments Issued Since Publication

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