



उत्पाद मानुयल
विलेय कॉफी कासनी चूर्ण
3309:2022 के अनुसार
PRODUCT MANUAL FOR
SOLUBLE COFFEE- CHICORY POWDER
ACCORDING TO IS 3309:2022

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मानुयल प्रमाणीकरणके प्रचलन में रीति और पारदर्शिता के सुसंगत सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस लाइसेन्स/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	उत्पाद Product	:	IS 3309 :2022
	शीर्षक Title	:	विलेय कॉफी कासनी चूर्ण Soluble Coffee Chicory Powder
	संशोधन संख्या No. of Amendments	:	Nil
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines:		
a)	कच्चा माल Raw material	:	The material shall be made from suitably roasted and ground coffee and roasted and ground chicory.
b)	समूहिकरण दिशा निर्देश Grouping guidelines	:	लागू नहीं Not applicable
c)	नमूनेका परिमाण Sample Size	:	500 gms
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	कृपया Annex-ए देखें Please see Annex – A

4.	निरीक्षण व परीक्षण स्कीम Scheme of Inspection and Testing	:	कृपया Annex-B देखें Please see Annex – B
5.	एक दिन में संभावित परीक्षण Possible tests in a day :		
	a)Description b) Cup test c) Moisture d) Caffeine (anhydrous) e) Total Ash f) Solubility in Boiling water g) Solubility in cold water h) Copper Content		
6.	लाइसेन्स का कार्यक्षेत्र / Scope of the Licence:		
	IS 3309 : 2022 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कार्यक्षेत्रके लिए प्रदान किया जाता है “Licence is granted to use Standard Mark as per 3309 : 2022 with the following scope:		
	उत्पाद का नाम Name of the product		विलेय कॉफी कासनी चूर्ण Soluble Coffee - Chicory Powder
	Any other relevant information		With or without ECO-Mark

BUREAU OF INDIAN STANDARDS
Manak Bhawan, 9, Bahadur Shah Zafar Marg,
New Delhi – 110002

ANNEX – A
LIST OF TEST EQUIPMENT

Major test equipment required to test as per the Indian Standard

Sr. No.	Tests used in with Clause Reference	Test equipment
1.	Cup Test Cl 3.2 & Annex-A of IS 3309	Weighing balance/ Analytical, Water boiler with temp controller, Watch glass, Porcelain bowl, Chlorine Free Water, Milk, Sugar, Stirrer, Thermometer (0-100°C; L.C 1°C)
2.	Moisture content Cl. 3.4 & Table 1 (IS 16029 for reference purpose and IS 16030 for routine purpose)	IS 16029 Pyridine free Karl Fischer reagent, Methanol, Molecular sieve(0.3 nm, pearl shaped; diameter approx. 2 mm, Drying Oven (40±5°C), Ultra-microbalance(LC= 0.000 1 g), Microbalance(LC= 0.001 g), Reflux apparatus, Heating device, Round-bottomed flask of 100 ml with conical sleeve, Reflux condenser(25 cm to 30 cm in length with conical ground joint), Drying tubes, Titration apparatus (consisting of End-point indicator, Platinum double electrode. Magnetic stirrer, Titration vessel, Burette), Syringe, Desiccator, Measuring cylinder, Pipettes
		IS 16030 Oven (103±1°C), Dish (made of corrosion-resistant metal or of glass, with lid and an effective surface area of at least 18 cm ²), Desiccators, Analytical Balance (LC=0.1mg)
3.	Caffeine(anhydrous) Cl. 3.4 & Table 1 (IS 16028)	Methanol, HPLC grade, Magnesium Oxide, heavy, high gale, Caffeine, Mobile phase(24 % volume fraction methanol in water), Volumetric flask, Filtration assembly, Analytical Balance, Membrane filter units of pore size 0,45 µm, HPLC with UV detector set at 272 nm (270 nm to 280 nm) or a filter detector (254 nm), and with a data collection/integration system, Chromatographic column for HPLC, of minimum length 125 mm, packed with C18 material, preferentially 5 µm spherical particles, Magnetic stirrer, Ultrasonic bath, Microlitre syringe, Coffee mill, Grinder with cogged wheel, Sieve, Pipettes, One-mark volumetric flasks(250 ml & 1 l).
4.	Total Ash Cl. 3.4 & Table 1 (Annex B of IS 2791)	Analytical Balance (L.C-0.1g), Platinum Dish, Heating Burner with fuel connection, Muffle Furnace (550±10°C; L.C:-1°C), Desiccator.
5.	Solubility in boiling water Cl. 3.4 & Table 1 (Annex C of IS 2791)	Test tube (150ml) , Heater, Analytical Balance, Beaker(500ml), Glass rod, Stop watch, Thermometer (L.C:-1°C)
6.	Solubility in cold water Cl. 3.4 & Table 1 (Annex C of IS 2791)	

7.	Copper content Cl. 3.5 (Cl. 15.1 of IS 1699)	Kjeldahl flasks, Atomic absorption spectrophotometer Nitric acid, Perchloric acid, Sulphuric acid-98%, Hydrochloric acid (sp gr 1.16 to 1.18), Water (metal free) Sodium Sulphate, Sodium borohydride pellets, Potassium Chloride, Copper sulphate, Flask (100mg), Zinc Powder Potassium Dichromate, Analytical balance, Heater, Measuring flask.
----	---	---

The above list is indicative only and may not be treated as exhaustive

ANNEX B
SCHEME OF INSPECTION AND TESTING

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare and implement a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING-The Standard Mark as given in the schedule of the licence shall be stenciled/printed on each container of Soluble Coffee Powder or printed on the labels applied to the container, as the case may be, provided always that the material in each container to which this mark is thus applied conforms to every requirement of the specification.

3.1 Marking: The information as mentioned under clause 4.2.1 of IS 3309 shall be legibly and indelibly marked on the label of the container. In addition, the following details shall be mentioned on each container legibly and indelibly:

- a) BIS Licence No. CM/L .
- b) BIS website details i.e – “For details of BIS Certification please visit www.bis.gov.in”.

3.1.1 The container may also be marked with ECO-Mark by ECO-Mark licence holder.

4. CONTROL UNIT – For the purpose of this scheme, the entire quantity soluble coffee chicory powder manufactured under similar condition from a day’s production of extract shall constitute a control unit (batch).

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

5.2 ECO Mark: The requirements for ECO Mark as stipulated under clause 3.7 of IS 3309 shall be implemented by the licensee holding licence for ECO Mark, which will be in addition to the product requirements.

6. HYGIENIC CONDITIONS- Soluble coffee-chicory powder shall be manufactured in premises built and maintained under hygienic conditions (see IS 2491). The handling equipment like roasters, grinders, extractors and driers, and the packing equipment shall be clean and free from any objectionable odour.

7. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1 (Levels of Control)
(Para 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method Cl. Ref.	Test Method IS		No. of Sample	Frequency	Remarks
3.1	Description	3.1	IS 3309	R	One	Once every Hour	
3.2	Coffee content and Chicory content	-	-	-	-	Each Control Unit	The manufacture shall declare and maintain records for coffee content and chicory content in the soluble coffee chicory powder for every control unit as per clause 3.2 of IS 3309.
3.3	Cup test	Annex A	IS 2791	R	One	Once every Hour	
3.4 & Table-1 (i)	Moisture	----	IS 16029 for reference purpose and IS 16030 for routine purpose	R	One	Every 4 hours	
(ii)	Caffeine(anhydrous)	-	IS 16028	R	One	Each Control Unit	See Note 3
(iii)	Total ash	Annex B	IS 2791	R	One	Each Control Unit	-do-
(iv)	Solubility in boiling water	Annex C	IS 2791	R	One	Each Control Unit	
(v)	Solubility in cold water at 16±2°C	Annex C	IS 2791	R	One	Each Control Unit	
3.5	Copper Content	15.1	IS 1699	S	One	Once in a month	See note 3

3.7	Free From Infestation	3.7.2.1	IS 3309	R	One	Each Control Unit	Specific requirement for ECO Mark
3.7	Free From Extraneous Matter, Added Coloring and Flavouring and Rancidity	3.7.2.2	IS 3309	R	One	-do-	Specific requirement for ECO Mark
3.7	Freedom from Adulterants	3.6.2.3	IS 3309	R	One	-do-	Specific requirement for ECO Mark
3.7	Pesticides Residues	3.6.2.4	IS 3309	S	One	-do-	Specific requirement for ECO Mark

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.

Note-3: If sample fails, subsequent five control units shall be tested, till all the five control units are found conforming and after that, the original frequency to be restored .