



**PRODUCT MANUAL
FOR SOLUBLE COFFEE POWDER ACCORDING TO IS 2791 : 1992**

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.	Product	IS 2791 : 1992
	Title	Soluble Coffee Powder
	No. of Amendments	05
2	Sampling Guidelines	
a)	Raw Material	The material shall be made from freshly prepared and roasted pure coffee Beans.
b)	Grouping Guidelines	NA
c)	Sample Size	2 x 200 gram (Approx)
3	List of Test Equipments	Please refer-ANNEX-A
4	Scheme of Inspection and Testing	Please refer-ANNEX-B
5	Possible Test in a Day	
	a) Cup test b) Moisture content c) Solubility in cold water d) Solubility in hot water e) Total Ash Content	
6	Scope of the licence:	
6	Licence is granted to use Standard Mark as per IS 2791 : 1992 with the following scope:	
	Name of the product	Soluble Coffee Powder
	Any other relevant information	With or without ECO Mark

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ANNEX A
TO PRODUCT MANUAL
FOR SOLUBLE COFFEE POWDER ACCORDING TO IS 2791 : 1992

LIST OF TEST EQUIPMENTS

Major test equipment required to test as per Indian Standard

Sr. No	Test used in with clause reference	Test equipment
1.	Cup test Cl. 3.2 & Annex A	Weighing balance/ Analytical, Water boiler with temp controller , Watch glass, Porcelain bowl, Chlorine free water, Milk, Sugar, Stirrer, Thermometer
2.	Moisture content Cl. 3.4 & Table 1 (Annex B of IS 2791)	<p>Method I Oven laboratory (95±2°C; L.C 1°C), Pure Nickel Dishes (90x12mm, Flat Bottomed), Desiccators, Analytical Balance</p> <p>Method II Isothermal Vacuum oven (70±1°C), Oven (101±1°C), Vacuum Pump (capable of reduce pressure in oven to 5000Pa), Dish (flat bottomed with tight lid, resistant to attack under the condition of test, Air dryer apparatus (Consisting of two washing bottles made of glass, filled with glycerol, to form a bubble train, and two drying towers made of glass containing a desiccant), Desiccators, Analytical Balance (LC-0.1mg)</p>
3.	Total Ash Cl. 3.4 & Table 1 (Annex C of IS 2791)	Analytical Balance (LC-0.1 mg), Platinum Dish, Heating Burner with fuel connection, Muffle Furnace (550±10°C; L.C:-1°C), Desiccator.
4.	Caffeine 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).
5.	Solubility in Hot water Cl. 3.4 & Table 1 (Annex E of IS 2791)	Test tube (150ml) ,Heater, Analytical Balance, Beaker (500ml),Glass rod, Stop watch, Thermometer
6.	Solubility in cold water Cl. 3.4 & Table 1 (Annex E of IS 2791)	
7.	Copper 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 list above is indicative only and may not be treated as exhaustive.

ANNEX-B
SCHEME OF TESTING AND INSPECTION
FOR SOLUBLE COFFEE POWDER ACCORDING TO IS 2791 : 1992

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 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 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 Packing: The material shall be packed in 25g, 50g, 100g, 200g, 500g, 1kg and multiples thereof, in air-tight tin plate or glass containers or in suitable metal foil laminate containers with food grade plastic lining. Where metal foil laminate containers with plastic lining are used, a cautionary notice to the following effect shall be printed:

“Once opened transfer contents immediately into air-tight container”.

3.1.1 The product/packing shall display in brief the criteria based on which the product has been labelled environment friendly.

3.1.2 The material used for product/packaging shall be recyclable (i.e. which can be reprocessed to manufacture any other useful product) or biodegradable and the parameters evolved under the SLEFP (Scheme on Labelling of Environment-Friendly Products) on the specific subject of packaging shall apply.

3.2 Marking: The information as mentioned under clause 4.2 of IS 2791 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”.

3.2.1 The container may also be marked with ECO mark by ECO mark licence holder.

4. CONTROL UNIT – For the purpose of this scheme, entire quantity of Soluble Coffee Powder manufactured under similar condition from one day’s production of extract shall constitute one 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.

5.3 ECO Mark: The requirements for ECO Mark as stipulated under clause 3.5 and 4.2.1 of IS 2791 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 Powder shall be processed and packed under hygienic conditions and the manufacturing premises shall be always 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

(1)				(2)	(3)		
TEST DETAILS				Test requirement R: required (or) S: Sub- contracting permitted	LEVELS OF CONTROL		
CL.	Requirements	Test Method Cl. Ref.	Test Method Is		No. of sample	Frequency	Remarks
3.1	Description	3.1 & 3.1.1	IS 2791	R	One	Once every hour	Immediately after spray drying during production
3.2	Cup Test	Annex A	IS 2791	R	-do-	-do-	
3.4 & Table 1	i) Moisture content	Annex B	-do-	R	One	Every 4 hours	
	ii) Total Ash	Annex C	-do-	R	One	Each control unit	
	iii) Caffeine	-	IS 16028	R	One	Each control unit	
	iv) Solubility In Boiling Water	Annex E	IS 2791	R	One	Once every hour	
	v) Solubility In Cold Water		-do-	R	One	Once every hour	
3.5	Copper Content	15.1	IS 1699	S	One	Once in a month	See Note 3
3.6.2.1	Free From Infestation	3.6.2.1	IS 2791	R	One	Each control unit	Specific requirement for ECO Mark
3.6.2.2	Free From Extraneous Matter, Coloring and Flavouring and Rancidity	3.6.2.2	-do-	R	One	-do-	Specific requirement for ECO Mark

3.6.2.3	Freedom From Adulterants	3.6.2.3	-do-	R	One	-do-	Specific requirement for ECO Mark
3.6.2.4	Pesticides Residues	3.6.2.4	-do-	S	One	-do-	Specific requirement for ECO Mark

Note-1: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control and submit his own levels of control in column 3 with proper justification for approval by BO Head.

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, if found conforming, original frequency may be restored.