



**PRODUCT MANUAL  
FOR BISCUITS ACCORDING TO IS 1011 : 2002**

**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.**

<b>1. Product</b>	:	IS 1011 : 2002
<b>Title</b>	:	Biscuits
<b>No. of Amendments</b>	:	01
<b>2. Sampling Guidelines:</b>		
a) Raw material	:	Materials used in the preparation of biscuits shall be as per clause 3.1, 3.2, 3.3, 3.4, 4.1.14 and 5.5.1 of IS 1011.
b) Grouping guidelines	:	NA
c) Sample Size	:	300 g
<b>3. List of Test Equipment</b>	:	Please see ANNEX - A
<b>4. Scheme of Inspection and Testing</b>	:	Please see ANNEX - B
<b>5. Possible tests in a day :</b>		
		i. General requirements ii. Moisture iii. Acidity of extracted fat iv. Acid insoluble ash
<b>6. Scope of the Licence :</b>		
		“Licence is granted to use Standard Mark as per IS 1011 : 2002 with the following scope:
Name of the product		BISCUITS
Type		Type I - Sweet Type II - Semi-sweet Type III - Crackers Type IV - Cookies Type V - Speciality biscuits Type VI - Salted

**ANNEX-A**  
**TO PRODUCT MANUAL**  
**FOR BISCUITS ACCORDING TO IS 1011 : 2002**

**LIST OF TEST EQUIPMENTS**

**Major test equipment required to test as per the Indian Standard**

SI No.	Tests used in with Clause Reference	Test Equipment
<b>1.</b>	Moisture Cl 6.3 & Table 1 (Annex B of IS 1011)	<b>Method I:</b> Electrical Moisture meter.  <b>Method II:</b> Electric Oven –capable of operating at 105 +1C, Desiccator, Moisture dish, made of porcelain, Silica, Glass or Aluminium, Analytical Balance, Stop watch
<b>2.</b>	Acidity of Extracted fat Cl 6.3 & Table 1 (Annex D of IS 1011)	Soxhlet Apparatus-with a 250 ml flat bottom flask, Oven, Analytical Balance, Stop watch, Water Bath, Fat Extraction Thimble, Condenser, Conical flask, cotton, Filter paper, Burette, Pipette, 10 ml micro burette, KOH Solution, Benzene, Phenolphthalein Indicator, Petroleum Ether, Ether-Ethanol stock solution.
<b>3.</b>	Acid Insoluble Ash Cl 6.3 & Table 1 (Annex C of IS 1011)	Silica/Porcelain Dish, Muffle Furnace-capable of operating at 600 ± 20°C, Water Bath, Desiccator, Stop watch, Analytical Balance, Watch glass, Glass rod, Thermometer, Whatman filter paper No. 42, Litmus Paper, Wash bottle, Dil. HCl.

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

**ANNEX B**  
**SCHEME OF INSPECTION AND INSPECTION**  
**FOR BISCUITS ACCORDING TO IS 1011 : 2002**

- 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 equipment.
- 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 Biscuits 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 and Marking shall be done as per the provision of the Indian Standard. 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](http://www.bis.gov.in)”
- 4. CONTROL UNIT -** For the purpose of this scheme, the quantity of biscuits of the same type manufactured in a day shall constitute a control unit.
- 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** On the basis of tests and analysis results, the decision regarding conformity or otherwise of a control unit shall be taken as follows:
    - 5.2.1** One sample of baked and finished biscuits shall be drawn from the production line in the first hour of production of each type of biscuits every day and shall be tested

for moisture content (in case it is determined by using moisture meter, the moisture meter shall be calibrated periodically against the oven method). If the moisture content of the sample does not exceed 3 percent, this may not be tested for that particular type of biscuits produced continuously on that day. If it is found that the moisture content exceeds 3 percent, sample shall be drawn every four hours and tested for moisture content. In case any samples fails to meet the moisture content requirements, the material manufactured during the respective four hours of production shall be considered unfit for the purpose of marking.

- 6. RAW MATERIAL** – The sample from each consignment of Edible salt, Hydrogenated vegetable oil and bakery shortening if used in the preparation of biscuit shall be tested for conformity to IS 253 or IS 7224, IS 10633 and IS 10634 respectively and appropriate records maintained. Alternatively, a certificate giving test results for various parameters for conformity to IS 253 or IS 7224, IS 10633 and IS 10634 shall be obtained from the suppliers for each consignment of Edible salt, Hydrogenated vegetable oil and bakery shortening respectively, received in the factory and appropriate records maintained.
  - 6.1** Water used shall conform to IS 14543 (Packaged Drinking Water) or IS 10500 (Drinking Water). All ingredients shall be clean, of good quality, and safe for use in food products.
- 7. HYGIENIC CONDITIONS** – The biscuits shall be manufactured in premises maintained under hygienic conditions (see IS 5059 Code for hygienic conditions for large scale biscuits manufacturing and bakery units). A routine cleaning chart should be drawn-up by the licensee and implemented as per IS 5059. All the workers engaged in production and packing shall use clean washed clothing, including head-covers. Incidental contamination from soiled equipment or from personnel suffering from injuries, eruptions or boils shall be avoided.
  - 7.1** All the raw materials as well as the finished product shall be stored in suitable places taking care to see that adventitious impurities do not find an entrance.
- 8. REJECTION-** 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 equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control		
Clause	Requirements	Test Method Cl. Ref.	Test Method IS		No. of Samples	Frequency	Remarks
6.1	General Requirement	6.1	Sensory	R	In accordance with the existing practices in the factory		
6.3 & Table 1	Moisture	Annex B	IS 1011	R	One	Every four hours	Also see clause 5.2.1 of SIT
-do-	Acidity of Extracted fat	Annex D	-do-	R	One	Each Control Unit	
-do-	Acid Insoluble Ash	Annex C	-do-	R	One	Once a week (Each Type)	

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 empaneled 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.