



**PRODUCT MANUAL
FOR WHEAT ATTA ACCORDING TO IS 1155 : 1968**

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 1155 : 1968
	Title	:	Wheat Atta
	No. of Amendments	:	03
2.	Sampling Guidelines:		
a)	Raw material	:	No specific requirement
b)	Grouping guidelines	:	NA
c)	Sample Size	:	700 g
3.	List of Test Equipment	:	ANNEX - A
4.	Scheme of Inspection and Testing	:	ANNEX - B
5.	Possible tests in a day :		
	i. Description ii. Microscopic appearance iii. Moisture iv. Total Ash v. Gluten vi. Granularity		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 1155 : 1968 with the following scope:		
	Name of the product		Wheat Atta
	Grade		Low Gluten (LG) and High Gluten (HG)

ANNEX-A
TO PRODUCT MANUAL
FOR WHEAT ATTA ACCORDING TO IS 1155 : 1968

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
1.	Moisture Cl 3.4 & Table 1 (Appendix A of IS 1155)	Analytical balance (0-200 g, LC-0.01 mg), Porcelain or silica or platinum dish, Electric oven, Desiccator, Silica gel, Calcium Chloride
2	Total Ash Cl 3.4 & Table 1 (Appendix B of IS 1155)	Porcelain or Silica or platinum dish, Weighing Balance, Burner, Muffle Balance, Silica gel or Calcium chloride, Desiccator.
3	Acid Insoluble Ash Cl 3.4 & Table 1 (Appendix C of IS 1155)	Porcelain or Silica or platinum dish, Weighing Balance, Water Bath, Watch glass, Filter paper(Whatman no.42 or its equivalent), Electric Air oven, \Desiccator, Silica gel, Calcium Chloride, Hydrochloric acid, Muffle furnace.
4	Gluten Cl 3.4 & Table 1 (Appendix D of IS 1155)	Weighing Balance, Beaker, Hot Air oven, Desiccator, Silica gel, Calcium Chloride, Porcelain dish, Bolting silk cloth with an aperture of 0.16mm/similar cloth or mesh, Iodine solution, Spatula.
5	Crude fibre Cl 3.4 & Table 1 (Appendix E of IS 1155)	Dilute Sulphuric Acid, Sodium Hydroxide solution, Ethyl Alcohol, Analytical balance, flask, Beaker, Reflux condenser, Heating mantle, Petroleum ether, Flat round bottom flask, Fat extraction flask fine linen (about 18 threads to the centimetre), funnel, litmus paper, Gooch crucible, ignited asbestos, Hot air oven –capable of operating at 105 \pm 2°C, Muffle furnace-capable of operating at 600 \pm 20°C, Desiccator.
6	Alcoholic acidity Cl 3.4 & Table 1 (Appendix F of IS 1155)	Neutral Ethyl Alcohol, Standard Sodium Hydroxide solution, Phenolphthalein indicator solution, Analytical balance (0-200 g, LC-0.01 mg), conical stoppered flask, Filter paper, Burette.
7	Granularity Cl 3.4 & Table 1 (Appendix G of IS 1155)	Analytical balance (0-200 g, LC-0.01 mg), 600 micron IS sieve, brush.
8	Microscopic appearance	Microscope.

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

ANNEX B
SCHEME OF INSPECTION AND INSPECTION
FOR WHEAT ATTA ACCORDING TO IS 1155 : 1968

- 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 Wheat Atta 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 clause 4.1, 4.1.1, 4.1.2, 4.1.3, 4.2 and 4.2.1 of the Indian Standard IS 1155. 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”
- 4. CONTROL UNIT -** For the purpose of this scheme, the quantity of Wheat Atta manufactured continuously in a day from the same consignment of raw materials 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 the test results, decision regarding the conformity or otherwise of a control unit of the Wheat Atta with the requirement of the specification shall be taken. In case of failure of sample, such material (control unit) shall be rejected.

6. **RAW MATERIAL** – Routine analysis of the raw materials used in the manufacture of Wheat Atta shall be carried out at regular intervals and records maintained. Alternately the raw materials of known composition may be used and a certificate obtained thereof.
7. **HYGIENIC CONDITIONS** – The place of manufacture, packing and storage of the material and equipments employed shall be maintained under hygienic conditions (see IS 2491). All processing equipments should be properly cleaned and care should be taken to prevent infestation and contamination.
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
3.1	Description	3.1	IS 1155	R	One	Each Control Unit	See Clause 5.2 of SIT
3.2	Microscopic appearance	3.2	-do-	R	-do-	-do-	
3.4 & Table 1	Moisture	Appendix A	-do-	R	-do-	-do-	
-do-	Total Ash	Appendix B	-do-	R	-do-	-do-	
-do-	Acid insoluble ash	Appendix C	-do-	R	-do-	-do-	
-do-	Gluten	Appendix D	-do-	R	-do-	-do-	
-do-	Crude Fibre	Appendix E	-do-	R	-do-	-do-	
-do-	Alcoholic acidity	Appendix F	-do-	R	-do-	-do-	
-do-	Granularity	Appendix G	-do-	R	-do-	-do-	

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.