



**PRODUCT MANUAL  
FOR NATURAL CHEESE (HARD VARIETY), PROCESSED CHEESE, PROCESSED  
CHEESE SPREAD AND SOFT CHEESE  
ACCORDING TO IS 2785 : 1979**

*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.	<b>Product</b>	:	IS 2785 : 1979
	<b>Title</b>	:	Specification for Natural Cheese (Hard Variety), Processed Cheese, Processed Cheese Spread And Soft Cheese.
	<b>No. of Amendments</b>	:	Nil
2.	<b>Sampling Guidelines:</b>		
a)	<b>Raw material</b>	:	All ingredients used shall be as per clause 3.1 of IS 2785.
b)	<b>Grouping guidelines</b>	:	NA
c)	<b>Sample Size</b>	:	Minimum of 500 g in original packing.
3.	<b>List of Test Equipment</b>	:	Please refer ANNEX – <u>A</u>
4.	<b>Scheme of Inspection and Testing</b>	:	Please refer ANNEX – <u>B</u>
5.	<b>Possible tests in a day:</b>		
	i. Appearance ii. Odour & Flavour iii. Texture & Consistency iv. Moisture v. Milk fat on dry basis vi. Salt		
6.	<b>Scope of the Licence:</b>		
	“Licence is granted to use Standard Mark as per IS 2785 : 1979 with the following scope:		
	<b>Name of the product</b>	Cheese	
	<b>Grade/Variety</b>	i. Natural Cheese (Hard Variety) ii. Processed cheese iii. Processed cheese spread iv. Soft cheese	

**ANNEX - A**  
**TO PRODUCT MANUAL**  
**FOR NATURAL CHEESE (HARD VARIETY), PROCESSED CHEESE, PROCESSED**  
**CHEESE SPREAD AND SOFT CHEESE**  
**ACCORDING TO IS 2785 : 1979**

**LIST OF TEST EQUIPMENT**

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

Sl. No.	Test Equipment	Tests used in with Clause Reference
1.	<p>Flat-Bottomed Dishes of nickel or other suitable material not affected by boiling water, 7 to 8 cm in diameter and not more than 2.5 cm deep, provided with short glass stirring rods having a widened flat end. Sand-which passes through 500-micron IS Sieve and is retained by 180-micron IS Sieve.</p> <p>Well-Ventilated Oven (capable of operating at <math>102 \pm 1^{\circ}\text{C}</math>)</p> <p>Analytical balance (0-200 grams/0.1 mg)</p> <p>Desiccator, Water bath, Distilled water.</p>	<p>Moisture</p> <p>Cl 2.1 &amp; 3.3.4, Appendix A</p>
2.	<p><b>Reference Method:</b></p> <p>Fat extraction tube/Mojonnier fat-extraction tube</p> <p>Well-Ventilated Electrically heated Oven set to operate at 98 to <math>100^{\circ}\text{C}</math>, Analytical balance, Water bath</p> <p>Hydrochloric Acid –sp gr 1.125, Ethyl Alcohol- 95 to 96 percent by volume, Diethyl ether- sp gr 0.720, peroxide-free, Light Petroleum - boiling range 40 to <math>60^{\circ}\text{C}</math>, Distilled water.</p> <p><b>Routine method:</b></p> <p>Van Gulik Butyrometer, Stoppers, Ten-Millilitre Pipette or Automatic Measure for Sulphuric Acid, One-Millilitre Pipette or Automatic Measure for Amyl Alcohol, Centrifuge, Water-Bath, Thermometer, Weighing device-which can be fitted to the large stopper of the butyrometer,</p> <p>Grater or Other Device for Grinding the Cheese,</p> <p>Sulphuric Acid having a density of <math>1.521 \pm 0.005</math> g/ml at <math>27^{\circ}\text{C}</math>, Amyl Alcohol - Conforming to Grade 1 of IS 360, Analytical balance.</p>	<p>Milk fat on dry basis</p> <p>Appendix B</p> <p>IS 9070</p>
3.	<p>Concentrated Nitric Acid – sp. gr 1.42 and chloride-free</p> <p>Iron Alum Solution, Potassium Chromate, Standard Silver Nitrate, Sodium chloride, Watch glass, Hot air oven</p> <p>Desiccator, Weighing bottle, Weighing balance (0-200 grams/0.1 mg), Distilled water, 1 litre measuring flask</p> <p>Burette, Pipette, Calcium carbonate, Potassium Thiocyanate, Concentrated Nitric acid, Erlenmeyer flasks of various capacities, Potassium permanganate – if required, Urea – if required, Acetone – if required.</p>	<p>Salt (added sodium chloride on dry basis)</p> <p>Appendix C</p>

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

**ANNEX - B**

**SCHEME OF INSPECTION AND TESTING  
FOR NATURAL CHEESE (HARD VARIETY), PROCESSED CHEESE,  
PROCESSED CHEESE SPREAD AND SOFT CHEESE  
ACCORDING TO IS 2785 : 1979**

**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 the Schedule of the licence, shall be stencilled/printed on the container of Natural Cheese (Hard Variety), Processed Cheese, Processed Cheese Spread and Soft Cheese or printed on the label applied to it, as the case may be, provided always that material so marked conform to requirements of the specification.

**3.1 Packing** – All the material used for wrapping or packaging the cheese shall be of such a nature as to impart no off-flavour or odour, nor in any other way contaminate the product packed under normal conditions of manufacture, storage and use. The metal cans when used for packing cheese shall be open top type with a soldered side-seam and compound-lined, double-seamed end. The inside of the can shall be coated with a suitable lacquer finish.

**3.2 Marking** – The containers shall be marked as per the provisions of the Indian Standard. In addition, the following shall be incorporated on each container:

a) BIS Licence Number 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 entire quantity of cheese manufactured out of one vat mixing 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.

**6. INGREDIENTS**- All ingredients used shall be as per clause 3.1 of IS 2785. Routine analysis of each consignment of raw materials received in the factory shall be carried out and appropriate records maintained.

**7. HYGIENIC CONDITIONS** - The material shall be manufactured, packed, stored and distributed under hygienic conditions (See IS 2491). All the processing equipments should be properly cleaned and care should be taken to prevent infestation.

**8. 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 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
3.3.1	Appearance	3.3.1	IS 2785	R	Ten	Every Control Unit	The samples should be drawn from kettles at regular intervals
3.3.2	Odour and Flavour	3.3.2	IS 2785	R	-do-	-do-	
3.3.3	Texture and Consistency	3.3.3	IS 2785	R	-do-	-do-	
3.3.4, Table 1, (i)	Moisture	Appendix A	IS 2785	R	Five	-do-	
3.3.4, Table 1, (ii)	Milk fat on dry basis	Appendix B	IS 2785	R	-do-	-do-	
3.3.4, Table 1, (iii)	Salt (added sodium chloride on dry basis)	Appendix C	IS 2785	R	-do-	-do-	Optional for Soft cheese

Note-1: 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-2: 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.