



**PRODUCT MANUAL FOR  
ICE CREAM  
ACCORDING TO IS 2802:1964**

**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 2802:1964
	<b>Title</b>	:	ICE CREAM
	<b>No. of Amendments</b>	:	4
2.	<b>Sampling Guidelines:</b>		
a)	<b>Raw material</b>	:	Shall be as per Clause 4 of IS 2802:1964
b)	<b>Grouping guidelines</b>	:	For covering any one variety flavor in the scope of license, a sample of each flavor may be drawn for testing
c)	<b>Sample Size</b>	:	1000g
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 :Physical Requirements (Cl.3.1,3.3) ,Weight and Total Solids percent by Weight (Cl. 4.1)and Table 1</b>		
6.	<b>Scope of the Licence :</b>		
	Licence is granted to use Standard Mark on Ice cream as per IS 2802:1964with the following scope:		
	Name of the product	Ice cream	
	Type	Plain or Nuts or Chocolate and Cocoa	

**ANNEX A**

**List of Test Equipment**

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

LIST OF CHEMICALS		Tests used in with Clause Reference
1	Hydro chloric Acid	Cl.4.1 and Table 1 of IS 2802
2	Hexane - LR	
3	Ammonium Sulpate Yellow	
4	Formaldehyde	
5	Ethylla Alcohol	
6	Activated Carbon	
7	Silica gel blue - 250g	
8	Crystal Violet Oxalated solution	
9	Ringer Solution	
10	Methylene Blue solution	
11	Sand ISI 180 - 500 Micron	
12	Alberts Metachromatic stain kit	
13	Neutral Red Solution	
14	P- Rosolic Acid	
15	Iso Amyl Alcohol	
16	MBRT Indicator	
17	VBR Agar	
18	Plate Count Agar	
19	Micro Pipette	
<b>List of Equipments</b>		
1	Weight Balance	Cl.4.1 and Table 1 of IS 2802
2	Centrifuge	
3	pH Meter,pH paper	
4	Incubator	
5	Hot Air Oven	
6	BOD Incubator	
7	Milk Analyser	
8	Auto Clave	
9	Laminar Air Flow	
10	Water Bath	
11	Domestic Refrigerator	
12	Commercial Refrigerator	
13	Hygienic Practices	
14	Pressure Gauge for Auto Clave	
15	Digital Thermometer	
16	Fat Extractor and Column Tubes	
17	Muffle Furnace	
18	Ice –cream Butyrometer	
19	Milk Butyrometer	

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

ANNEX-B  
**SCHEME OF INSPECTION AND TESTING**  
**For ICE CREAM according to IS 2802:1964**

**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. MARKING**– The Standard Mark(s) as given in Column(1) of the first Schedule of the licence shall be printed/stenciled on each package of Ice-cream or printed on the label applied to the container as the case may be provided always that the material in each container to which this mark is applied conforms to every requirement of the specification.

In addition to the Standard Mark, the following information shall be clearly and indelibly marked on each Package of Ice Cream:-

- a) Name of the Manufacturer recognised trade Mark , if any
- b) Name and full address of the Manufacturer
- c) Batch or Code Number; and
- d) Net volume of Content in Litres/Millilitres
- e) Name of the Product with proper prefix , such as fruit, nut chocolate
- f) Identification in code or other wise to trace book the date and lot of manufacturer to the factory records.
- g) Container, wrapper or label shall be marked with the particulars required under the Prevention of Food Adulteration Rules, 1955
- h) BIS certification details, visit website [www.bis.org.in](http://www.bis.org.in)

**3.1 PACKING** –all The materials used for wrapping or packaging the ice-cream shall be of such a nature as to impact no off flavor or odour in any other way contaminate the product packed under normal conditions of atmosphere , storage and use shall be packed as per the provisions specified under clause 6.1 of IS 1008 : 2004.

**4. CONTROL UNIT** –For the purpose of this Scheme, all the ice cream of one type obtained from the continuous freezer at one time 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.

**6.0 HYGIENIC CONDITIONS** –Wherever applicable, hygienic conditions shall be complied in day to day production and quality control activities. Schedule for each activity for this purpose shall be displayed prominently in the factory premises and records of compliance shall be maintained.

**6.1** The products ice cream shall be processed, packed, stored and distributed under strictly hygienic conditions (*see IS :2491*). Contamination shall be absolutely avoided.

**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. A separate record shall be maintained giving information relating to the rejection of the production not conforming to the requirements of specification and the method of its disposal. Such material shall in no case be stored together with that conforming to the Specification. The Standard Mark (if already applied) on rejected material shall be defaced.

**TABLE 1**

**Levels of Control**  
**(Para 5.0 of the 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 Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
3.1 to 3.3	<b>Physical Requirements</b>	Visual and physical	IS 2802	R	One	One Control Unit	
4.1 & Table 1	Weight in grams, per litre	Appendix-A	IS 2802	R			-
-do-	Total solids Percent by weight	Appendix-B	IS 2802	R			-
-do-	Milk fat %	Appendix-C	IS 2802	R			
-do-	Acidity % (as lactic acid)	Appendix-D	IS 2802	R			
-do-	Sucrose % by weight	Appendix -E	IS 2802	R			
-do-	Total Colony count per gram	Appendix -F	IS 2802	R			
-do-	Coliform count	Appendix -G	IS 2802	R			
-do-	Phosphate Test of Mix	Appendix -H	IS 2802	R			

Note-1: 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.