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उत्पाद मैन्युअल

मलाईरहित दूध पाउडर — विशिष्टि

भाग 1 मानक ग्रेड

IS 13334 (भाग 1): 2025 के अनुसार

PRODUCT MANUAL

Skimmed Milk Powder — Specification
Part 1 Standard Grade
ACCORDINGTO IS 13334 (Part 1): 2025

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक संख्या **IS No.**	:	**IS 13334 (Part 1) : 2025**
	शीर्षक **Title**	:	**Skimmed Milk Powder— Specification Part 1 Standard Grade**
	संशोधनों की संख्या **No. of amendments**	:	NIL
2.	नमूना दिशानिर्देश **Sampling Guidelines**		
a)	कच्चा माल **Raw material**	:	Milk intended for production of skimmed milk powder shall be tested for its freedom from Neutralizers, Preservatives and adulterants. (Cl. 4.2)
b)	समूहीकरण दिशानिर्देश **Grouping Guidelines**	:	NA
c)	नमूने का परिमाण **Sample Quantity**	:	2 x 500 g (separate samples for chemical and microbiological tests) packed in air-tight containers. Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (in case of market surveillance, effort may be made to procure the required quantity of

			product sample, as far as possible since raw material sample may not be available in market).
d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**		• Process: Spray drying/Roller drying • Concentration Factor Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	**परीक्षण उपकरणों की सूची** **List of Test Equipment**	:	Please refer to Annex-A
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	Please refer to Annex-B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**		
	i. Description ii. Absence of extraneous matter, added colour and added flavour iii. Flavour and taste iv. Moisture v. Milk protein in milk solids not fat vi. Milk fat vii. Insolubility Index viii. Total ash ix. Titratable acidity x. Scorched particles Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide ready reference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	**लाइसेंस का दायरा /Scope of the Licence:**		
	Licence is granted to use Standard Mark as per IS 13334 (Part 1): 2025 with the following scope:		
	Name of the product	Skimmed Milk Powder-Standard Grade	
	Process	Spray drying, Roller drying	

ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Sodium Content, Cl 4.7	Analytical balance One-mark volumetric flasks One-mark pipettes Micropipette Graduated measuring cylinder, of capacity 10 ml High-density polyethylene (PE-HD) bottles Silica crucibles Programmable furnace oven Open focused microwave-assisted wet digestion system Pressurized microwave-assisted wet digestion system Decomposition vessels Oven Flame atomic absorption spectrometer Water baths Centrifuge Appropriate grinding device Sieve Nitric acid (HNO3), concentrated, Nitric acid (HNO3) solution, Lanthanum trichloride solution, Calcium ion stock solution. Sodium ion stock solution Potassium ion stock solution Magnesium ion stock solution Standard working solution, Light petroleum Hydrogen peroxide
2.	Moisture, Cl. 4.6, 4.8 & Table 1	Drying oven capable of being maintained at $87^0C \pm 1^0C$ throughout the working space, LC 1^oC. Metal block Copper tubes Constant pressure regulator Tube, made of polycarbonate Columns made of hard polypropylene Synthetic stoppers Container, suitable for holding columns and synthetic stoppers Rod made of polyvinyl chloride Soap-film meter, suitable for measuring a flow of 33 ml/min Dry compressed air, minimum pressure of 200 kPa, moisture content of 0.01 mg H_2O per litre at atmospheric pressure, free of any organic material. Use metal tubes only to connect the source of compressed air to the equipment in the drying oven. Analytical Balance, LC 0.1 mg Flat bottom moisture dishes with cover Desiccator Screw capped bottles, Durham tubes, test tubes Sterile blender jar Inoculating loop, platinum-iridium or nickel-chromium or disposable loops Stop watch Volumetric Flask, 100ml, 250 ml & 1000 ml

		OR **Alternate method as per IS 16072** Flat-Bottom Moisture Dishes with Cover Drying Oven Desiccator Bottles OR **Alternate method as per ISO 21543** Near infrared (NIR) instrument as per clause 6.1 Grinding or grating device as per clause 6.2
3.	Milk protein in milk solids not fat, Cl. 4.6, 4.8 & Table 1	**As per IS 11917** Water bath Analytical balance, capable of weighing to the nearest 0,1 mg Burette or automatic pipette Graduated measuring cylinders, of capacity 25 ml, 50 ml, 100 ml and 500 ml. Conical flasks, of capacity 500 ml. Automatic burette, Grinding device Digestion flasks (Kjeldahl) Boiling aids Digestion apparatus Distillation apparatus (traditional method) Digestion block (block digesting method) Digestion tubes (block digesting method), Exhaust manifold (block digesting method) Centrifugal scrubber apparatus or filter pump or aspirator (block digesting method), Volumetric flasks, one mark of 50 ml, 250 ml and 1 000 ml capacities. Distillation unit (block digesting method) Automatic titrator provided with a pH-meter. Spatula or suitable transfer device. Filter paper Illuminated magnetic stirrer plate Copper (II) sulfate pentahydrate solution Potassium sulfate (nitrogen free) Sulfuric acid (H_2SO_4) Sodium hydroxide (NaOH) solution Indicator solution Boric acid solution Hydrochloric acid standard volumetric solution Ammonium sulfate Tryptophan or lysine hydrochloride Sucrose
4.	Milk Fat, Cl. 4.6, 4.8 & Table 1	**As per Annex B of IS 13334 (Part 1):** Centrifuge with Centrifuge tubes Butyrometer, 6 Percent, 8 Percent and 10 Percent Scale with stopper Pipettes Analytical Balance, 0-500 g, LC 0.1 g Water bath, upto 100°C, LC 0.1°C Sulphuric acid Amyl alcohol Stemless -Funnel Wash bottle Glass rod Grater or Pestle and Mortar

		Scoop Camel hair brush **<u>As per IS 19396:</u>** Ammonia solution, containing a mass fraction of NH3 of approximately 25 %, Ethanol (C2H5OH), or ethanol denatured by methanol, containing a volume fraction of ethanol of at least 94%, Indicator solution (optional), Bromocresol purple solution, Patent blue V, Diethyl ether, free from peroxides, Light petroleum, with any boiling range between 30 °C and 60 °C, Analytical balance (capable of weighing to the nearest 1 mg, with a readability of 0.1 mg), Centrifuge (capable to produce a radial acceleration of around 80g to 90g at the outer end of the flasks or tubes), Distillation or evaporation apparatus, Drying oven (electrically heated, with ventilation port(s) fully open, capable of being maintained at a temperature of 102 °C ± 2 °C throughout its working space. The oven shall be fitted with a suitable thermometer.), Water bath (capable of being maintained at a temperature of 37,5 °C ± 2,5 °C, 50 °C ± 5 °C, 65 °C ± 5 °C and at boiling point), Fat-extraction flasks: o Mojonnier-type fat-extraction flasks o Extraction tubes-type fat extraction flask o Stoppers Rack, Wash bottle, Fat-collecting vessels, Measuring cylinders or delivering systems, Pipettes or delivering systems, Tongs, Blender, Boiling aids
5.	Insolubility index , Cl. 4.6, 4.8 & Table 1	Silicon antifoaming agent Thermometers for measuring 24°C and 50°C, error <u>+</u>0.2°C max Water bath, upto 100°C, LC 0.1°C Scoop Analytical balance LC 0.01g Electric mixer Interval timer Centrifuge with Centrifuge tubes Siphon fitting or suction tube attached to water pump Scoop Camel hair brush Stirring rod Magnifying glass
6.	Total Ash (on moisture and fat free basis), Cl. 4.6, 4.8 & Table 1	Flat-Bottom Dish, of stainless steel, porcelain, silica or platinum Muffle Furnace upto 1200°C, LC 1°C Desiccator Air-Oven, capable of maintaining 100°C <u>+</u> 2°C, LC 1°C Flame for pre-heating Analytical Balance
7.	Titratable acidity, Cl. 4.6, 4.8 & Table 1	Heater for boiling water Analytical balance Sodium hydroxide Phenolphthalein solution Porcelain Dishes stirring rods
8.	Scorched particles, Cl. 4.6, 4.8 & Table 1	Scorched particles filtering discs Scorched particles Discs test cards Scorched particles tester Scorched particles standard photoprints for dry milk Analytical Balance, 0-500 g, L C 0.1 g Waring blender Defoaming agent
9.	Aerobic plate count , Cl. 4.6, 6 & Table 2	Plate count agar Overlay medium Oven Autoclave Incubator (30° C+1°C Petri dishes

		Water bath Colony counter pHmeter test tubes, flasks/bottles Filtration assembly and filter paper Laminar Air Flow Bench
10.	Coliform count, Cl. 4.6, 6 & Table 2	Crystal violet neutral red bile lactose (VRBL) agar Brilliant green lactose bile broth Oven or Autoclave Incubator, 30^{O}c+ 1^{O}c or 37^{o}C+1^{o}C Petri dishes Total delivery plates Water bath, 44^{O}c TO 47^{O}c or 100^{o}C Colony counter Test tubes Durham tubes Bottles or flasks pHmeter loop Filtration assembly and filter paper Laminar Air Flow Bench
11.	Staphylococcus aureus (Coagulase positive), Cl. 4.6, 6 & Table 2	Apparatus for dry sterilization (oven) and wet sterilization (autoclave) Incubator Water bath Sterile tubes, bottles or flasks Sterile Petri dishes Straight wire or Pasteur pipette Sterile graduated pipettes or automatic pipettes Spreaders pH-meter Refrigerator Membranes Baird-Parker agar (BPA) plate/ rabbit plasma fibrinogen agar medium
12.	Yeast and mould count, cl. 4.6, 6 & Table 2	Incubator, capable of operating at 25 °C ± 1 °C Total delivery pipettes, sterile, of nominal capacity 1 ml, and graduated in divisions of 0,1 ml Water bath, or similar apparatus, capable of operating at 44 °C to 47 °C. pH meter, accurate to 0,1 pH units at 25 °C. Bottles, flasks and tubes, for boiling and storage of culture media, and for making of dilutions. Petri dishes, sterile, of glass or plastic, with a diameter 90 mm to 100 mm. Microscope, Spreaders, Binocular magnifier Dichloran 18 % (mass concentration) glycerol agar (DG18)
13.	Salmonella Spp., Cl. 4.6, 6 & Table 2	Apparatus for dry sterilization (oven) or wet sterilization (autoclave). Drying cabinet or oven, capable of operating between 25 °C and 50 °C. Incubator(s), capable of operating in the range 34 °C to 38 °C and at 37 °C ± 1 °C Incubator, capable of operating at 41,5 °C ± 1 °C or water bath capable of operating at 41,5 °C ± 1 °C. Water bath, capable of operating at 47 °C to 50 °C. Water bath, capable of operating at 37 °C ± 1 °C. Water bath, capable of operating at 45 °C ± 1 °C. Refrigerator

		Freezer Sterile loops pH-meter Sterile tubes, bottles, or flasks Sterile graduated pipettes or automatic pipettes Sterile Petri dishes Rappaport-Vassiliadis medium with soya (RVS broth) or Modified Semi-solid Rappaport-Vassiliadis (MSRV) agar and Muller-Kauffmann tetrathionate-novobiocin broth (MKTTn broth)
14.	Listeria monocytogenes, Cl. 4.6, 6 & Table 2	Lithium chloride acriflavine and nalidixic acid (half fraser broth) Fraser broth Oxford agar PALCAM agar Selective solid plating-out media Tryptone soya yeast extract agar (TSYEA) Tryptone soya yeast extract broth (TSYEB) Sheep blood agar Carbohydrate utilization broth (rhamnose and xylose) Motility agar Laminar Air Flow Bench CAMP (Christie, Atkins, MunchPetersen) medium and test strains Hydrogen peroxide solution Phosphate-buffered saline (PBS) Oven or autoclave for sterilization BOD Incubator, 5 -50^{o}C, LC 0.1^{o}C Water bath, capable of being maintained at 47 ‘c t 2‘c. Loops pH meter test tubes or flasks measuring cylinder Filtration assembly and filter paper
15.	Bacillus cereus, Cl. 4.6, 6 & Table 2	Apparatus for dry sterilization (oven) or wet sterilization (autoclave) Drying cabinet or incubator Incubator, capable of operating at 30 °C ± 1 °C. Water baths, capable of being maintained at 44 °C to 47 °C pH-meter, accurate to within ± 0,1 pH units at 25 °C. Petri dishes Graduated pipettes Spreaders MYP agar
16.	Sulphite reducing clostridia, Cl. 4.6, 6 & Table 2	Apparatus for dry sterilization (oven) or wet sterilization (autoclave). Incubator, capable of operating at 37 °C ± 1 °C. pH-meter, Refrigerator, capable of operating at 5 °C ± 3 °C. Sterile bottles, flasks or tubes, Sterile graduated pipettes or automatic pipettes, Sterile loops, of approximately 1 µl volume, or inoculation needle or wire. Thermostatically controlled water bath, capable of operating at 44 °C to 47 °C and 80 °C ± 2 °C. Appropriate apparatus for achieving an anaerobic atmosphere, iron sulfite agar (ISA) medium
17.	E.coli, Cl. 4.6, 6 & Table 2	Apparatus for dry sterilization (oven) or wet sterilization (autoclave) Incubator, capable of operating at 37 °C ± 1 °C and 44 °C ± 1 °C. Water bath, capable of being maintained at 44 °C ± 1 °C. Test tubes Sampling loops, Durham tubes

		Total-delivery pipettes pH-meter lauryl sulfate broth
18.	Lead, Cl. 4.10 & Table 3	AAS Pure Lead Metal Concentrated Nitric Acid Concentrated Hydrochloric Acid Standard Lead Solution
19.	Arsenic, Cl. 4.10 & Table 3	Atomic Absorption Spectropbotometer Concentrated Hydrochloric Acid Concentrated Nitric Acid Concentrated Sulphuric Acid Potassium Iodide Sodium Borohydride Standard Arsenic Solution water bath
20.	Aflatoxing M_1, Cl. 4.10 & Table 3	Pure solvents Acetonitrile/methanol solution, Toluene/acetonitrile solution TLC development solvents. Aflatoxin M1 standard solution. Volumetric pipettes, of required capacities. Hamilton-like microsyringes. 1) Laboratory glassware, such as glass beakers and funnels, of appropriate capacities One-mark volumetric flask, of capacity 200 ml. Measuring cylinder, of capacity 100 ml. Disposable syringes, of capacities 10 ml and 100 ml. Glass conical tube, of capacity 5 ml, to collect the extract after the clean-up step. Evaporation system, rotary evaporator or by using a gentle stream of nitrogen. Spectrometer, Water bath, capable of operating at between 35 °C and 37 °C. Centrifuge, Filter paper (Whatman No. 41) or equivalent Affinity columns Analytical balance, capable of weighing to the nearest 0,1 g. Magnetic stirrer. Vortex type stirrer. Vacuum system, for immunoaffinity cartridge. Oven, capable of maintaining a temperature of approx. 50 °C. Thin-layer chromatography (TLC) container. Thin-layer chromatography (TLC) plates, UV lamp, capable of operating at 365 nm. Densitometer (optional). OR **<u>Alternate Method as per IS 18110</u>** Disposable syringes, of capacities 10 ml and 50 ml. Vacuum system Centrifuge, Pipettes, Glass beakers,

		One-mark volumetric flask, of capacity 100 ml. Water baths, Filter paper, Graduated conical glass tubes, HPLC apparatus, Reversed phase HPLC analytical column Fluorescence detector, Spectrophotometer Analytical balance Immunoaffinity column. Acetonitrile, Nitrogen gas. Aflatoxin M_1 standard solutions.
21.	Melamine, Cl. 4.10 & Table 3	Water, for chromatography use Acetonitrile Ammonium acetate Cyanuric acid Labelled cyanuric acid Melamine Labelled melamine Conical tubes, polypropylene, of capacity 50 ml. Centrifuge, Volumetric pipettes, Automatic micropipette, Nylon syringe filter, of porosity 0,22 µm. Degassing system Analytical balance Sonification device Vials LC-MS/MS equipment. HPLC Column One-mark volumetric flasks

ANNEX B
SCHEME OF INSPECTION AND TESTING

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 in various formats, Form 1 for the tests carried out to establish conformity.

3. LABELLING, PACKING AND MARKING— Labelling and marking shall be as given below:

3.1 STANDARD MARK: The Standard Mark, as specified in the Schedule of licence, shall be stencilled with indelible ink or printed on labels applied to the container of skimmed milk powder provided always that the material in each container to which this mark is applied conforms to every requirement of the specification.

3.2 MARKING – The package shall bear legibly and indelibly the information as given under clause 5.2 of IS 13334 (Part 1). In addition to above, following marking shall also be marked:

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3.3 PACKING: The material shall be packed as per cl. 5.1 of IS 13334 (Part 1).

3.3.1 For Repacking units, the packing material used in repacking shall be of desired quality so as to avoid any change in the original properties and preclude contamination of the contents. Each package/container of the repacking shall be visually examined for soundness of packing and correctness of labels.

4. CONTROL UNIT–

4.1 For manufacturing units of Skimmed Milk Powder: For the purpose of this Scheme, the entire quantity of milk powder manufactured continuously at a time from a single process (Spray drying or Roller drying) in a period of 24 hours or a part thereof shall constitute a control unit.

4.1.1 Raw Milk: The raw milk received in factory shall be tested for fat, SNF, COB, Neutralizers, Additives, etc, and appropriate records maintained. Milk intended for production for skimmed milk powder shall be tested for freedom from Neutralizers, Preservatives, Adulterants and necessary records maintained.

4.2 For repacking units of Skimmed Milk Powder: For the purpose of this Scheme, each control unit of BIS certified Skimmed Milk Powder, Standard Grade accompanied by the manufacturer Test Certificate and repacked continuously up to a period of 24 hrs, shall constitute a control unit.

4.2.1 Test certificates of each control unit of the product shall be received from the manufacture holding valid BIS licence for Skimmed Milk Powder, Standard Grade according to IS 13334 (Part 1).

4.2.2 The re-packer shall maintain appropriate controls and checks to ensure that there is no chance of mixing of two different materials or two different batches of the same material.

4.3. On the basis of test and analysis results decision regarding the conformity or otherwise of a control unit of skimmed milk powder to the requirements of the specification shall be made as follows:

4.3.1 A sample shall be taken at the packing/repacking stage after every half an hour which shall be examined visually for appearance, colour, absence of lump and extraneous matter; examined by organoleptic methods for flavour and taste, absence of added colour & added flavour. If the sample does not conform to the specification in any one or more of these requirements, the material manufactured during the half an hour prior to the drawl of sample shall either be rejected or reprocessed and the defect(s) rectified. Such reprocessed material when tested again shall conform to all the requirements of the specification.

In case of repacking units, if the sample does not conform to the specification in any one or more of these requirements, the material shall be rejected.

4.3.2 Two samples shall be drawn from every control unit – one during the first half of the packing period and other during the second half of the packing period. These samples shall be individually tested for Moisture, Milk Protein in Milk Solids not fat, Insolubility index, Milk fat, Titratable acidity, Scorched particles, Aerobic plate count, Coliform count, Yeast and mould count & Escherichia coli. If any one or both the samples fail to conform to anyone or more of these requirement(s) as given in the specification, the entire material in the control unit shall not be marked. In case of manufacturers, the material may, however, be reprocessed and the defect(s) rectified. Such reprocessed material when tested again shall conform to all the requirements of the specification.

4.3.3 Two samples from every seventh control unit (starting from a control unit chosen at random) shall be tested for total ash. If any one or both the samples fail to satisfy the requirement, the corresponding control unit shall not be marked. The material in the control unit may, however, be reprocessed and the defect rectified. Such reprocessed material when tested again shall conform to all the requirements of the specification. Two samples from every subsequent control unit shall be tested for the characteristic where failure has occurred till seven consecutive control units are found meeting the specification requirement, whereupon the original frequency of testing may be resumed.

4.3.4 Two samples once in a week shall be tested for total ash. If the sample fails to satisfy the requirement, the corresponding control unit shall not be marked. Two samples from every subsequent control unit shall be tested for the characteristic where failure has occurred till seven consecutive control units are found meeting

the specification requirement, whereupon the original frequency of testing may be resumed.

4.3.5 A sample shall be drawn every month for the testing of Coagulase positive Staphylococcus aureus, Salmonella, *Bacillus cereus*, *Sulphite reducing clostridia*, and *Listeria monocytogenes*. In case of failure of the sample in any one or more of these characteristics the corresponding control unit shall not be marked and two samples from every subsequent control unit shall be tested for the characteristic(s) where failure has occurred, till five consecutive control units are found meeting the specification requirement(s) whereupon the original frequency of testing may be resumed.

4.3.6 All processing and drying should be carried out in a manner that minimizes loss of nutritive value, particularly protein quality.

4.3.7 Undertaking to be submitted by the manufacturer/repacking unit stating that it shall be the responsibility of the manufacturer/repacking unit to comply with the relevant requirements as per Food Safety and Standards (Contaminants, toxins and residue) Regulations, 2011 and maintain records of the conformance.

6. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control submitted by the manufacturer 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.

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

7.1 Repacking Units: The process of opening of bulk packing of the product and retail packing as per 5.1 of IS 13334(Part 1) shall be done under hygienic conditions as per IS 2491. There should not be any ingress of foreign matter while opening/transfer of material.

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
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		
Test Details				**Test equipment requirement R: required (or) S: Sub-contracting permitted**	**Levels of control**		
Cl.	**Requirements**	**Test Method Cl. Ref.**	**Test Method IS**		**No. of samples**	**Frequency**	**Remarks**
4.1	Description (General)	4.1	IS 13334 (Part 1)	R	One	Every half an hour	See Clause 4.3.1 of SIT
4.2	Freedom from preservatives, neutralizers and adulterants	4.2	-do-	Manufacturer to maintain records of compliance for the parameters in the raw milk			
4.3	Absence of extraneous matter, added colour & added flavour	4.3	-do-	R	One	Every half an hour	See Clause 4.3.1 of SIT
4.4	Limit of permitted food additives	4.4	-do-	Manufacturer to maintain records for compliance of the parameter as per the limits specified under Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011			
4.5	Flavour and Taste	4.5	-do-	R	One	Every half an hour	See Clause 4.3.1 of SIT
4.7	Sodium Content	4.7	IS 12760	R	Two	Each Control Unit	
4.6, 4.8 & Table 1	Moisture	4.7, 4.8 & Table 1	IS 11623 or IS 16072 or ISO 21543	R	Two	Every half an hour	
-do-	Milk Protein in milk solids not fat	-do-	IS 11917	R	Two	Each Control Unit	See Clause 4.3.2 of SIT
-do-	Milk Fat	Annex B	IS 19396 or IS 13334 Part 1	R	Two	-do-	-do-
-do-	Insolubility Index a) Spray dried b) Roller dried	-	IS 12759	R	Two	-do-	-do-
-do-	Total Ash (on moisture and fat free basis)	Annex C	IS 14433	R	Two	-do-	i) Applicable for SMP manufactur ers. Also See Clause

							4.3.3 of SIT. ii) Applicable for repacking units. Also See Clause 4.3.4 of SIT
-do-	Titratable Acidity	-	IS 11766	R	Two	Each Control Unit	See Clause 4.3.2 of SIT
-do-	Scorched Particles	-	IS 13500	R	Two	Each Control Unit	-do-
Microbiological requirements							
4.6, 6 and Table 2	Aerobic Plate Count	4.6, 6 and Table 2	IS 5402 (Part 1)	R	Two	Each Control Unit	See Clause 4.3.2 of SIT
-do-	Coliform Count	-do-	IS 5401 (Part 1)	R	Two	-do-	-do-
-do-	Staphylococcus aureaus (Coagulase positive)	-do-	IS 5887 (Part 8/Sec1 or Sec 2	S	One	Once in a Month	See Clause 4.3.5 of SIT
-do-	Yeast and mould count	-do-	IS 16069 (Part 2)	R	Two	Each Control Unit	See Clause 4.3.2 of SIT
-do-	Salmonella spp.	-do-	IS 5887 (Part 3/Sec1)	S	One	Once in a Month	See Clause 4.3.5 of SIT
-do-	Listeria monocytogenes	-do-	IS 14988 (Part 1)	S	One	-do-	-do-
-do-	Bacillus cereus	-do-	IS 5887 (Part 6)	S	One	-do-	-do-
-do-	Sulphite reducing clostridia	-do-	IS 18349 (Part 1)	S	One	-do-	-do-
-do-	Escherichia coli	-do-	IS 16424	R	Two	-do-	See Clause 4.3.2 of SIT
4.9	Pesticide residue, antibiotic and veterinary drug residues	-	IS 13334 (Part 1)	Manufacturer to maintain records for compliance of the parameter as per the limits specified under Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.			
4.10 and	Metal Contaminants/other contaminants/ toxic substance (aflatoxin M1 and Melamine)						

Table 3							
-do	Lead	-	IS 12074	S	One	Once in a Month	
-do	Arsenic	-	IS 11124	S	-do-	-do-	
-do	Aflatoxin M1	-	IS 18108 or IS 18110	S	-do-	-do-	
-do	Melamine	-	IS 16195	S	-do-	-do-	

Para 2 of the Sheme of Inspection and Testing
RECORD OF RECEIPT OF CERTIFIED SKIMMED MILK POWDER PART 1
STANDARD GRADE AND REPACKING

FORM 1

Date of Receipt	Manufacturer Name and Address	Control Unit & Date of Mfg As Declared by The Manufacturer	Shelf Life of Product Declared by Manufacturer On packing	Qty Recd	Test Report No.	Date of Repacking	Control Unit No.	Shelf Life of Product Declared by Repacker (Shall Be Less Than or Equal to That Declared By Original Manufacturer	Total Qty Repacked	Balance of Control Unit	Remarks