केन्द्रीय मुहर विभाग-2

हमारा संदर्भ : के.मू.वी.-2/16:1656 **01 02 2018**

विषय : आई एस 1656:2007 "दुग्ध अनाज आधारित अनुपूरक आहार" की प्रारूप संशोधित एसटीआई

1. यह आई एस **1656:2007** की प्रचलित **एसटीआई Doc: 1656/10 दिस्म्बर 2012 के संदर्भ में है ।**

2. उपरोक्त एसटीआई पर प्राप्त टिप्पणी अनुसार एक **प्रारूप संशोधित एसटीआई Doc: 1656/11 XXXX 2018 तैयार की गई है एवं अवलोकन के लिए** संलग्नित है ।

3. सभी संबंधित से अनुरोध हैं कि प्रारूप दस्तावेज की जांच करें और **15 फ़रवरी 2018** तक या उससे पहले केन्द्रीय मुहर विभाग-2 को टिप्पणी भेजें ।

4. सभी शाखा कार्यालयों से अनुरोध किया जाता है कि संबंधित प्रारूप दस्तावेज़ को सभी आवेदकों/ लाइसेंसधारियों को जो उनके अधिकार क्षेत्र में हैं, टिप्पणियों के लिए उनकी जानकारी में लाए और साथ ही टिप्पणियों को, यदि कोई हो, निर्धारित समय के भीतर केन्द्रीय मुहर विभाग-2 को भेजें ।

(आदित्य दास)
वैज्ञा.सी.

प्रमुख (CMD-2)

सभी क्षेत्रीय/शाखा/एफएडी/एमएसडी कार्यालयों को परिचालित

प्रतिलिपि: ITS इंट्रानेट पर अपलोड करने के लिए

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16:1656 01 Feb 2018

Subject: Draft Revised STI for IS 1656:2007 - "Milk- Cereal based complementary foods"

1. This has reference to the prevailing STI Doc:1656/10 December 2012 for IS 1656:2007.

2. Based on feedback received at CMD-2 on the above STI document, a draft revised STI Document Doc: STI/1656/11 XXXX 2018 has been prepared for the above product and is enclosed for kind perusal.

3. All concerned are requested to examine the draft document and provide comments to CMD-2 on or before **15 February 2018**.

4. All BOs are also requested to bring the draft document to the notice of applicants/licensees under their jurisdiction for their comments as well and forward such comments, if any to CMD-2 within the stipulated time as above.

(Aditya Das)
Scientist C

Head CMD-2

Circulated to: All ROs/BOs/FAD/MSD

Copy to: ITS – for hosting on BIS Website

DRAFT

SCHEME OF TESTING & INSPECTION FOR CERTIFICATION OF MILK – CEREAL BASED COMPLEMENTARY FOODS ACCORDING TO IS 1656 : 2007

(Incorporating Amendments No. 1 and 2)

1. Laboratory - A laboratory shall be maintained which shall be suitably equipped and staffed to carry out the different tests in accordance with the methods given in the Indian Standards.

2. Test Record - All records of analysis and tests shall be kept in suitable forms approved by the Bureau of Indian Standards.

2.1 Copies of any records that may be required by BIS shall be made available at any time on request.

3. Quality Control - It is recommended that, as far as possible, Statistical Quality Control (SQC) methods may be used for controlling the quality of the products as envisaged in this Scheme [See IS 397 (Various parts)].

3.1 The following instruments/equipments are required to be brought under calibration control, as per frequency to be decided depending upon the usage.

3.2 In addition, effort should be made to gradually introduce a Quality Management System in accordance with IS/ISO 9001:2008.

4. Standard Mark - The Standard Mark as given in Column(l) of the first Schedule of the licence shall be stenciled with indelible ink or printed on labels applied to the container of Milk Cereal based Complementary foods thus provided always that the material in each container to which this mark is applied conforms to every requirement of the specification.

5. Marking – In addition, the following information shall be given legibly and indelibly on the container:-

a) Name of the material, that is, milk cereal based weaning food, and the brand name, if any;
b) Name and address of manufacturer;
c) Batch or code number;
d) Month and year of manufacturing or packing;
e) Net mass;
f) Date before which the contents should be consumed be indicated by marking the words ‘use before……. (month & years)

g) Composition –Indicating the approximate composition of nutrients per 100 g of the product as well as the energy value in Joules;
h) Feed chart and the directions for use;
i) Licence No. (CM/L-……..); and;
k) Any other requirements as stipulated under the Legal Metrology (Packaged Commodities) Rules,2011 and Food Safety and Standards (Food Products Standards and Food Additives) Regulation, 2011
l) BIS website address: www.bis.org.in

6. Packing – The material shall be packed as per Cl. 6.1 and Cl. 6.1.1 of IS 1656 : 2007.

7. Control Unit – For the purpose of this Scheme, the quantity of milk –cereal based Complementary foods manufactured continuously in a day shall constitute a control unit.

7.1 On the basis of test results, the decision regarding conformity or otherwise of a control unit to a given requirement shall be made.

8. Levels of Control – The tests as indicated in Table 1 and at the levels of control specified therein, shall be carried out on the whole production of the factory covered by the Scheme and appropriate records and charts maintained in accordance with Clause 2 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with Certification Mark of the Bureau.

8.1 A sample shall be taken at the packing stage every hour which shall be examined visually for description, color, absence of dust and extraneous matter; examined by organoleptic methods for flavour and odour. If the sample does not conform to the specification in any one or more of these requirements, the material manufactured during the hour prior to the drawal of sample either be rejected or reprocessed for its conformity to these requirements of the standard.

8.2 Four samples/control unit before packing and at equal intervals of time shall be taken for testing moisture. In case of failure of any of these samples, the material in the control unit be either rejected or reprocessed for rectification of the defect. The material so reprocessed shall be tested for moisture after every two hours for consequent four such control unit and when all these samples conform to the requirements of the specification, the original frequency given in Table 1 for the parameter shall be restored.

8.3 Two samples shall be taken from every control unit before packing and at equal interval of time (one sample to be drawn after every 12 hours in case of 3 shifts operation & one sample after 8 hours in case of 2 continuous shift operation) and individually tested for fat, total carbohydrates, bacterial count, coliform count and Escherichia coli. If any one or both the samples fail to conform to anyone or more of these requirements as given in the specification, the entire material in the control unit shall not be marked. 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.

8.4 One sample from every seventh control unit shall be tested for Vitamin A; Vitamin C, Iron. One sample from every 15^{th} control unit shall be tested for Crude Fibre. If any one sample fail to satisfy the requirements of any one or more of these characteristics, the corresponding control unit shall not be marked, the material in the control unit may, however, be reprocessed and the defect(s) rectified. Such reprocessed material when tested again shall conform to all the requirements of the specification. One sample from every subsequent control unit shall be tested for the characteristics where failure has occurred till seven consecutive control units are found meeting the specification requirements, whereupon the original frequency of testing may be resumed. In case the production is started after the shut down of the plant, for more than a week's time for any reason, it shall be ensured, before packing and dispatching the material with Standard Mark that the material is tested and found conforming to all the requirements of the specification.

8.5 One sample shall be tested for Heavy metals and the absence of Staphylococcus, aureus, Salmonella and Shigella. 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 Characteristics(s) where failure has occurred till five consecutive Control units are found to meet the specified requirements, whereupon the original frequency of testing may be resumed. The requirements for salmonella and shigella shall be tested in the laboratory situated away from the production area.

8.6 One sample from every fourth Control Unit of the same type shall be tested for proteins, total ash and acid insoluble ash. In case failure of the sample in either of these requirements, the Control Unit shall be considered unfit for the purpose of marking, the control unit may, however, be reprocessed and the defect(s) rectified. Such reprocessed material when tested again shall conform to all these requirements before it is considered fit for marking. All subsequent Control Units shall be tested for those requirements till five consecutive Control Units tested conforms to these requirements of the specification.

8.7 All ingredients used in manufacturing the product including the optional ones shall be clean, of good quality, safe and suitable for ingestion by infants. They shall conform to their normal quality requirements such as colour, flavour & odour. The vitamins and minerals shall be of good grade. Iron salts should be such as to ensure high bio-availability of iron. The source of mineral salts and vitamin compounds may be used as given under clause 5.4.2 of IS 1656:2007. Appropriate records in relation the statement made in the Para shall be maintained.

8.8 Milk-cereal based Complementary foods shall contain a minimum of 20 percent milk Casien by mass of the product, and a minimum of 5 percent of milk fat of the product. It shall not contain hydrogenated fats containing terms-fatty acids. It may contain fungal alpha amylase upto a maximum extent of 0.025 percent by mass. It may also include amino acids such as lysine, methionine, taurine, carnitine etc. Records for these shall be maintained by the manufacturers.

8.9 Milk-cereal based Complementary foods shall be free from dirt and extraneous matter, preservatives, added colour, added flavour. It shall also be free from any material which are harmful to human health. It shall be reasonably free from scorched particles.

8.10 As there is no suitable and easily workable method at present for determination Vitamin D, Thiamine, Riboflavin, and Nicotinic acid content of a product like milk – cereal based weaning foods, the manufacturers would be required to maintain a record showing the quantity of these 'Vitamins' added to each batch. A register shall also be maintained separately giving details of added vitamins. The total quantity of these materials in stock, the quantity used in each batch and the balance in stock shall also be recorded.

8.11 In respect of all other Clauses of the specification, the factory shall maintain controls to ensure that the product conforms to the various requirements of the specification.

9. Hygienic Conditions - The factory shall maintain clean and hygienic condition as given in IS 2491. All the processing equipments should be properly cleaned and care should be taken to prevent infestation.

10. Rejection - A separate record shall be maintained giving information relating to the rejection of units of Milk-cereal based Complementary foods which do not conform to the specification and the method of their disposal. Such material, if packed in containers, shall in no case be stored together with that conforming to the specification.

11. Samples - The licensee shall supply, free of charge, the sample or samples required in accordance with the Bureau of Indian Standards (Certification) Regulations from his factory or godown. BIS shall pay for the samples taken by it from the open market.

12. Replacement - Whenever a complaint is received soon after the goods with the Standard Mark have been purchased and used, and if there is adequate evidence that the goods have not been misused, defective goods or their components shall be replaced or repaired free of cost by the licensee in case the complaint is proved to be genuine and the warranty period (where applicable) has not expired. The final authority to judge conformity of the product to the Indian Standard shall be with BIS. The firm should have its own complaint investigation systems as per IS/ISO 10002:2004.

12.1 In the event of any damages caused by the goods bearing the Standard Mark, or claim being filed by the consumers against BIS Standard Mark and not "conforming to" their relevant Indian Standard, entire liability arising out of such non conforming product shall be of licensee and BIS shall not in any way be responsible in such cases.

13. Stop Marking - The marking of the product shall be stopped under intimation to BIS, if at any time, there is some difficulty in maintaining the conformity of the product to the specification or the testing equipment goes out of order. The marking may be resumed as soon as the defects are removed under intimation to BIS.

The marking of the product shall be stopped immediately if directed to do so by BIS for any reason. The marking may then be resumed only after permission by BIS. The information regarding resumption of marking shall also be sent to BIS.

14. Production Data - The licensee shall send to BIS as per the enclosed proforma to be authenticated by a Chartered Accountant or by the manufacturer by giving an affidavit /undertaking, a statement of quantity produced, marked and exported by him and the trade value there of end of each operative year of the licence.

IS 1656 : 2007
MILK CEREAL BASED COMPLEMENTARY FOODS
TABLE 1 LEVELS OF CONTROL
(Clause 8 of the Scheme of Testing and Inspection

TEST DETAILS				LEVEL OF CONTROL		
Clause	**Requirements**	**Test Method**		**No. of Samples**	**Frequency**	**REMARKS**
		Clause	**Reference**			
4, 5.1 to 5.4	Description	4, 5.1 to 5.4	IS 1656	One	Every hour	See 8.1 of STI
5.6	Flavour and Odour	5.6	-do-	One	-do-	-do-
5.7.1	Bacterial Count	-	IS 5402	Two	Each Control Unit	See 8.3 of STI
5.7.2	Coliform Count	-	IS 5401(Part 1)	Two	-do-	-do-
5.7.3	Escherichia Coli	-	IS 5887 (Part 1)	Two	-do-	-do-
5.7.4	Staphylococcus Aureus	-	IS 5887 (Part 2)	One	Once in a month	See 8.5 of STI
5.7.5	Salmonella and Shigella	-	IS 5887 (Part 3) & IS 5887 (Part 7)	One	-do-	-do-
5.7.6	Yeast and Mould count		IS 5403	One	Each Control Unit	
Table 1 5.8						
Sr i)	Moisture	-	IS 16072 (Routine Purpose) & IS 11623 (Reference Purpose)	Four	Each Control Unit	See 8.2 of STI
ii)	Total Protein	-	IS 7219	One	4th Control Unit	See 8.6 of STI
iii)	Fat	Annex B	IS 1656	Two	Each Control Unit	See8.3 of STI
iv)	Total Carbohydrates	Annex C	IS 1656	Two	Each Control Unit	See 8.3 of STI
v)	Total Ash	Annex B	IS 14433	One	4th Control Unit	See8.6 of STI
vi)	Acid Insoluble Ash	Annex C	-do-	One	4th Control Unit	See8.6 of STI
vii)	Vitamin A	-	IS 5886	Two	Every 7th Control Unit	See 8.4 of STI
viii)	Vitamin C	-	IS 5838	Two	-do-	-do-

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TEST DETAILS				LEVEL OF CONTROL		REMARKS
Clause	**Requirements**	**Test Method**		**No. of Samples**	**Frequency**	
		Clause	**Reference**			
ix)	Iron	Annex D	IS 14433	Two	Every 7th Control Unit	See 8.4 of STI
x)	Crude Fibre	-	IS 10226 (Pt 1)	Two	Every 15th Control Unit	-do-
xi)	Added Vitamin D	-	IS 5835	-	-	*
xii)	Thiamine	-	IS 5398	-	-	
xiii)	Riboflavin	-	IS 5399	-	-	
xiv)	Niacin	-	IS 5400	-	-	
xv)	Folic Acid	-	IS 7234	One	Once in a month	See 8.5 of STI
xvi)	Zinc	15	IS 1699	One	-do-	-do-
xvii)	Copper	15	IS 1699	One	-do-	-do-
xviii)	Heavy Metals					
	a) Lead	-	IS 12074	One	Once in a month	See 8.5 of STI
	b) Arisenic	-	IS 11124	One	-do-	-do-
	c) Tin	17	IS 2860	One	-do-	-do-
	d) Cadmium	15	IS 1699	One	-do-	-do-

The Indian Standards on methods for test as indicated in Column 4 is presently given for guidance only as they are under revision at present. As no other suitable and easily workable method is available at present, the manufacturers would be required to maintain a record showing the quantity of these 'Vitamins" added to each batch/C.U (See 8.10)

APPENDIX I
PROFORMA FOR OBTAINING PRODUCTION DETAILS

(Period to be covered by the Report being to)*

Name of Licensee

CM/L No.

Name of Articles(s) IS No.

Grade/type/Size/Variety/Class/ Rating

1.1 Brand/Trade/Name(s) of BIS Certification Marked Products

2. Total production of the article(s) licensed for certification marking

2.1 Total production of the article(s) conforming to Indian Standard

3. Production covered with BIS Certification Mark and its approximate value

a) Quantity
b) Value Rs.

3.1 Brand Name used on production covered under BIS Certification Mark

3.2 Calculation of marking fee on Unit-rate basis: Marking Fee per unit

a) Unit
b) Quantity covered with BIS Certification Mark
-
*Information to be filled up by BO before forwarding to the licensee.

Note: In case a clause is not applicable, suitable remarks may be given against it.

c) Marking fee rounded off in whole rupees as obtained by
applying unit rates given in (a) on quantity given in (b)

4. Quantity not covered with BIS Certification Mark. If any, and
the reasons for such non-coverage

4.1 Brand Name under which non certified goods were sold

5. Quantity Exported with BIS Standard Mark and its value
5.1 Brand Name under which BIS Certified goods are exported

6. Authentication by Chartered Accountant