

හැඳින්වීම

මෙම ශ්‍රී ලංකා ප්‍රමිති කෙටුම්පත , ශ්‍රී ලංකා ප්‍රමිති ආයතනය විසින් සකසන ලදුව, සියලුම උදෙසාගේ අංශ වලට තාක්ෂණික විවේචනය සඳහා යවනු ලැබේ.

අදාළ අංශ භාර කමිටු මාර්ගයෙන් ආයතනයේ මහා මණ්ඩල වෙත ඉදිරිපත් කිරීමට පෙර , ලැබෙන සියලුම විවේචන ශ්‍රී ලංකා ප්‍රමිති ආයතනය විසින් සලකා බලා අවශ්‍ය වෙනොත් කෙටුම්පත සංශෝධනය කරනු ලැබේ.

මෙම කෙටුම්පතට අදාළ යෝජනා හා විවේචන නියමිත දිනට පෙර ලැබෙන්නට සැලැස්වුවහොත් අගය කොට සලකමු. තවද, මෙම කෙටුම්පත පිළිගත හැකි බැව් හැඟෙන අය ඒ බව දන්වන්නේ නම් එය ආයතනයට උපකාරී වනු ඇත.

මේ පිළිබඳව එවන සියලුම ලිපි පහත සඳහන් ලිපිනයට එවිය යුතුය.

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Introduction

This Draft Sri Lanka Standard has been prepared by the Sri Lanka Standards Institution and is now being circulated for technical comments to all interested parties.

All comments received will be considered by the SLSI and the draft if necessary, before submission to the Council of the Institution through the relevant Divisional Committee for final approval.

The Institution would appreciate any views on this draft which should be sent before the specified date. It would also be helpful if those who find the draft generally acceptable could kindly notify us accordingly.

All Communications should be addressed to:

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**DRAFT SRI LANKA STANDARD
SPECIFICATION FOR FERMENTED MILK PRODUCTS
PART 1: CURD**

DSLS 824:Part 1:.....

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**DRAFT SRI LANKA STANDARD
SPECIFICATION FOR FERMENTED MILK PRODUCTS
PART 1: CURD**

FOREWORD

This Standard was approved by the Sectoral Committee on Food Products and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on

This specification consists of two parts as follows:

Part 1 : Curd, Part2 : Yoghurt

This Specification was first published in 1988. In this revision, microbiological requirements have been updated by introducing three class plan and limits for *Salmonella*, *Staphylococcus aureus* and *Listeria monocytogenes*. Also the references to the latest methods of test have been given.

This specification is subject to the restrictions imposed under the Sri Lanka Food Act No.26 of 1980 and the regulations framed thereunder.

The standard values used throughout this specification are given in SI units.

For the purpose of deciding whether a particular requirement of this specification is complied with, the final value, observed or calculated expressing the result of a test or an analysis, shall be rounded off in accordance with SLS 102. The number of significant places retained in the rounded off value should be the same as that of the specified value in this specification.

In the preparation of this specification the assistance obtained from the publications of the Bureau of Indian Standards and Codex Alimentarius Commission is gratefully acknowledged.

1 SCOPE

This part of specification prescribes the requirements and methods of sampling and test for curd.

2 REFERENCES

ISO 11290 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection and enumeration of *Listeria monocytogenes* -- Part 1: Detection method

| | | |
|---------------|--------------|--|
| ISO/TS | 11869 | Fermented milks -- Determination of titratable acidity -- Potentiometric method |
| SLS | 102 | Rules for rounding off numerical values |
| SLS | 143 | Code of practice for general principles of food hygiene |
| SLS | 191 | White sugar |
| SLS | 393 | Part 5 Specific rules for the preparation of milk and milk products |
| SLS | 428 | Random methods. |
| SLS | 467 | Labeling of prepackaged foods. |
| SLS | 516 | Method of test for microbiology of food and animal feeding stuffs Part 2 : Horizontal method for the detection and enumeration of yeast and moulds Section 1 : Colony count technique in products with water activity greater than 0.95 Part 3 : Horizontal method for the detection and enumeration of coliforms section 1: Most Probable Number Part 5 : Horizontal method for the detection of <i>Salmonella spp.</i> Part 6 : Horizontal method for the enumeration of coagulase positive <i>Staphylococcus aureus</i> and other species Section 1 Part 12: Horizontal method for the detection and enumeration of presumptive <i>Escherichia coli</i> (moat probable number method) |
| SLS | 614 | Potable Water |
| SLS | 735 | Methods of test for milk and milk products Part 1: Determination of fat Part 5: Determination of total solids |
| SLS | 872 | Code of hygienic practice for dairy industries |
| SLS | 1463 | General requirements and guidance for microbiological examinations of food and animal feeding stuffs. |

2 DEFINITIONS

For the purpose of this standard, the following definitions shall apply:

3.1 fermented milk products: Milk product obtained by fermentation of milk, which milk may have been manufactured from products obtained from milk with or without compositional modification as limited by the provision in Section 4.6 , by the action of suitable microorganisms and resulting in reduction of pH with or without coagulation (iso-electric precipitation). These starter microorganisms shall be viable, active and abundant in the product to the date of minimum durability. If the product is heat treated after fermentation the requirement for viable microorganisms does not apply.

3.2 curd: Fermented milk product obtained from coalulation of cow milk or buffalo milk by a harmless lactic acid producing bacterial culture.

4 REQUIREMENTS

4.1 Hygienic requirements

Curd shall be processed, packed stored and distributed under hygienic conditions as specified in SLS 143 and SLS 872.

4.2 General requirements

4.2.2 Curd shall have a pleasant odour and characteristic flavour.

4.2.3 Curd shall be clean, free from dirt and extraneous matter.

4.2.4 Curd shall be firm solid and free of lumps, It shall be of uniform consistency with negligible whey separation.

4.3 Curd shall not contain more than 300 mg/kg of sorbic acid, if used. No preservatives shall be added other than sorbic acid.

4.4 Curd shall also comply with the requirements specified in Table 1 when tested according to the methods prescribed in Column 5 of the table.

TABLE 1 - Requirements for curd

| SI No. (1) | Characteristic (2) | Curd (3) | Buffalo Curd (4) | Method of test (5) |
|------------|---|----------|------------------|---|
| i) | Milk fat, per cent by mass, min | 5.0 | 7.0 | SLS 735 : Part 1 |
| ii) | Milk solid not fat per cent by mass, min. | 8.5 | 8.5 | SLS 735 :Part 1 and SLS 735 Part 5 |
| iii) | pH, max. | 4.5 | 4.5 | Appendix B |

4.5 Microbiological requirements

The product shall conform to the limits given in Table 2, when tested according to the method prescribed in Column 7 of the table.

TABLE 2 - Microbiological limits

| SI NO (1) | Organism (2) | n (3) | c (4) | m (5) | M (6) | Method of test (7) |
|------------------|--|--------------|--------------|--------------|---------------------|-----------------------------|
| i) | <i>Coliform</i> , MPN per g | 5 | 2 | 10 | 1 X 10 ² | SLS 516 : part 3: Section 1 |
| ii) | <i>Staphylococcus aureus</i> (coagulase positive), per g | 5 | 2 | 10 | 1 X 10 ² | SLS 516 : part 6: Section 1 |
| iii) | Yeast and mould, per g | 5 | 3 | 50 | 1 X 10 ² | SLS 516 : part 2: Section 1 |
| iv) | <i>Escherisia coli</i> , MPN per g | 5 | 0 | 0 | - | SLS 516 : part 12 |
| v) | <i>Salmonella</i> , per 25 g | 5 | 0 | Absent | - | SLS 516 : part 5 |
| vi) | <i>Listeria monocytogenes</i> , per g | 5 | 0 | Absent | - | ISO 11290 |

5 PACKAGING AND MARKING

5.1 Packaging

Curd shall be filled in clay pots, or food grade containers and lids containers suitable for food use and capped or suitably closed.

5.2 Marking

5.2.1 Marking and/ or labelling

The following shall be marked or labeled legibly and indelibly on each container destined for the final consumer.

- a) Name of the product as “curd” or “buffalo curd” or “cow curd”;
- b) Brand name or trade name, if any;
- c) Net mass in ‘g’ or ‘kg’;
- d) Any permitted food additive’s name or INS number; if any
- e) The name and address of the manufacturer;
- f) List of ingredients, in descending order of their proportion
- g) Batch or code number or a decipherable code marking;
- h) Date of manufacture;

- j) Date of expiry;
- k) Country of origin, in case of imported products;
- m) Storage conditions; and
- n) Information for use.

5.2.2 The marking and labeling shall also be in accordance with **SLS 467**.

6 SAMPLING

Representative samples of honey shall be drawn according to the method prescribed in Appendix A.

7 METHODS OF TEST

Test shall be carried out as specified in **ISO 11290, SLS 516 : part 2 : Section 1, SLS 516 : part 3 : Section 1, SLS 516 : part 5, SLS 516 : part 6: section 1, SLS 516 : part 12, SLS 735: part 1, SLS 735 : part 5, Appendix B and Appendix C.**

8 CONFORMITY TO STANDARD

A lot shall be declared as confirming to the requirement of this specification if all the test results satisfy the relevant requirements.

- 8.1** Each container inspected as in **A.4.1** satisfies the relevant requirements.
- 8.2** Each sample tested as in **A.4.2** satisfies the microbiological requirements.
- 8.3** Each sample tested as in **A.4.3** satisfies the relevant requirements.
- 8.4** The test results of the composite sample satisfy the relevant requirements.

APPENDIX A COMPLIANCE OF A LOT

A.1 Lot

In any consignment all the containers of the same size and manufactured under conditions of manufacture shall constitute a lot.

A.2 General requirements of sampling

When taking samples the following precautions shall be taken.

A.2.1 Samples shall be drawn in a protected place not exposed to damp air, dust or soot.

A.2.2 The samples for microbiological analysis shall be drawn first.

A.2.3 The samples shall be protected against adventitious contamination.

A.2.4 The sampling instruments shall be clean and dry when used. When taking samples for microbiological examination, the sampling instruments shall be sterilized.

A.2.5 The samples shall be kept in glass or suitable containers. They shall be clean and dry when used. The samples for microbiological examination shall be kept in sterilized containers.

A.2.6 The samples shall be stored in such a manner than there will be no deterioration of quality of the material.

A.2.7 The sample containers shall be sealed air-tight after filling and marked with necessary details of sampling.

A.2.8 Samples shall be examined within 24 hours of receipt at the Laboratory and shall be held at 0 °C to 5 °C until the commencement of testing.

A.3 Scale of sampling

A.3.1 The samples shall be tested from each lot for ascertaining its conformity to the requirements of this specification.

A.3.2 The number of containers to be selected from a lot shall be in accordance with Table

TABLE 3 - Scale of sampling

| No . of containers in the lot (1) | No. of containers to be selected (2) |
|--------------------------------------|---|
| Up to 90 | 5 |
| 91 to 150 | 6 |
| 151 to 200 | 7 |
| 201 and above | 8 |

A.3.3 In addition to the Table 3, 5 samples (5 containers) to be drawn for the microbiological testing.

A.3.4 The containers shall be selected at random. In order to ensure randomness of selection, tables of random numbers as given in **SLS 428** shall be used.

A.4 Number of tests

A.4.1 Each container selected as in **5** shall be inspected for packaging and marking requirements.

A.4.2 Sufficient quantity of material shall be drawn from each container selected as in **A.2.4**, using an appropriate sampling instrument which has been sterilized. Each sample thus obtained shall be transferred to separate sample containers and shall be tested individually for microbiological requirements.

A.4.3 The contents of each container selected as in **A.2.4** shall be examined for requirement given in **4.2, 4.3, 4.4** and **4.5**.

A.4.4 A sufficient quantity of material shall be taken from each container selected as in **A.2.4** and placed in a container to form a composite sample. The composite sample thus obtained shall be tested for the requirements given in **Table 1**.

APPENDIX B MICROBIOLOGICAL EXAMINATION

Samples shall be examined within 24 hours of drawing at the laboratory and shall be held between 0 °C and 5 °C until the commencement of testing.

B.1 PREPARATION OF TEST SAMPLE

Sample shall be prepared in accordance with **SLS 393 : part 3** clause **9.8**.

APPENDIX C DETERMINATION OF pH

C.1 PROCEDURE

pH shall be determined using a pH meter preferably with a glass electrode.

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