SRI LANKA STANDARD 737 : 1986

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SPECIFICATION FOR
BUNS

SRI LANKA STANDARDS INSTITUTION

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SLS 737:1986

Gr. 5

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Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD
SPECIFICATION FOR BUNS

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1986-04-30, after the draft, finalized by the Drafting Committee on Bread, had been approved by the Agricultural and Food Products Divisional Committee.

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

All standard values given in this specification are in SI units.

For the purpose of deciding whether a particular requirements of this specification is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with CS 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 related publications of the Indian Standards Institution is gratefully acknowledged.

1 SCOPE

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

2 REFERENCES

CS 79 Edible common salt

CS 102 Presentation of numerical values

CS 141 White bread

CS 143 Recommended code of practice for general principles of food hygiene

CS 144 Wheat flour

SLS 428 Random sampling methods

SLS 614 Potable water.

3 ESSENTIAL INGREDIENTS

3.1 *Flour*, conforming to **CS 144.**

3.2 *Leavening agents*

Any of the following agents singly or in combination may be used.

3.2.1 Baker's yeast

The yeast shall be either active dry yeast or compressed yeast (*Saccharomyces cerevisiae* Hansen) and it shall be in sound condition.

3.2.2 Brewer's yeast, of sound condition.

3.2.3 Hops barm

3.3 *Edible common salt*, conforming to **CS 79.**

3.4 *Water*, conforming to **SLS 614.**

3.5 *Edible fat*, minimum of 7.5 per cent by mass of the flour.

3.6 *Sugar*, minimum of 20.0 per cent by mass of the flour.

4 OPTIONAL INGREDIENTS

4.1 In addition to the essential ingredients specified in **3**, the following ingredients may be added to the bun dough:

4.1.1 *Milk and milk products*

Fresh milk, condensed milk or milk powder (whole **and/or** skimmed), or a combination of these ingredients, not exceeding two per cent by mass of the flour.

4.1.2 *Gluten*, not exceeding two per cent by mass of the flour.

4.1.3 *Malt products*, not exceeding two per cent by mass of the flour.

4.1.4 *Rice flour*, potato starch, corn flour, tapioca flour or soya flour or a combination of these ingredients (see Note 1).

4.1.5 *Vitamins*

4.1.5.1 Vitamin B_1, not less than 2.4 mg/kg of the flour (see Note 2).

4.1.5.2 Nicotinic acid or nicotinamide, not less than 16 mg/kg of the flour (see Note 2).

4.1.6 *Fungal enzymes* (protease and/or diastase), not exceeding two per cent by mass of the flour.

4.1.7 *Lysine hydrochloride*, not exceeding 0.25 per cent of the mass of the flour.

4.1.8 *Lecithin* (see Note 1).

4.1.9 *Stearyl tartrate* (see Note 1).

4.1.10 *Sodium carboxy methyl cellulose, edible sodium alginate, edible guar gum* and *edible gum tragacanth* (see Note 1).

4.1.11 *Glycerine, glyceryl monostearate* and *mono and diglycerides* of other fatty acids (see Note 1).

NOTES

1 The addition of these ingredients to bun should be in accordance with good manufacturing practice.

2 The minimum limits would apply if a claim is made by a manufacturer.

4.1.12 *Benzoyl peroxide*, not exceeding 50 mg/kg of the flour.

4.1.13 *Chlorine dioxide*, containing not more than 20 per cent of chlorine (calculated by volume).

4.1.14 *Calcium phosphate*, not exceeding 0.6 per cent of the mass of the flour.

4.1.15 *Calcium carbonate*, not exceeding 0.5 per cent of the mass of the flour.

4.1.16 *Dried fruits.*

4.1.17 *Glazed cherries/raisins*, and

4.1.18 *Minerals.*

4.2 Improvers

The following improvers in the quantities given against each may be permitted:

4.2.1 *Ammonium persulphate, potassium persulphate, potassium bromate*, or any combination of these the total being not more than 0.01 per cent of the mass of the flour.

4.2.2 *Ammonium chloride*, not exceeding 0.3 per cent of the mass of the flour.

4.3 Mould and rope inhibitors

The following mould and rope inhibitors in the quantities given against each may be permitted.

4.3.1 *Calcium or sodium propionate or porpionic acid*, calculated as propionic acid, not exceeding 0.3 per cent of the mass of the flour.

4.3.2 *Acetic acid (glacial) or lactic acid*, not exceeding 0.2 per cent of the mass of the flour.

4.3.3 *Vinegar*, not exceeding three per cent of the mass of the flour.

4.3.4 *Acid calcium phosphate*, not exceeding 0.6 per cent of the mass of the flour.

4.3.5 *Sodium diacetate*, not exceeding 0.3 per cent of the mass of the flour.

4.3.6 *Acid sodium pyrophosphate*, not exceeding 0.3 per cent of the mass of the flour.

5 GENERAL REQUIREMENTS

5.1 The bun shall be baked in round, elliptical or in any other shape as agreed to between the purchaser and the vendor. The top of the bun shall be smooth and golden to light brown in colour.

5.1.1 The bun shall have a good volume (see 5.4). The crumb shall have small pores uniformly distributed throughout. It shall be free from clots or unmixed lumps of dough.

5.1.2 There shall be no hollow between the crust and the crumb.

5.1.3 The flavour shall be characteristic of fresh, well-baked bun. It shall be free from bitterness or any other objectionable taste.

5.1.4 The bun shall be free from mould and rope growth.

5.2 The bun shall be manufactured in premises maintained under hygienic conditions, as required by CS 143.

5.3 Mass

Each bun shall have a minimum mass of 50 g. The mass shall be determined by weighing 10 buns simultaneously and calculating their mean.

5.4 The bun shall be considered as having a good volume if its volume to mass ratio is not less than 2.5 when tested by the method prescribed in Appendix B of SLS 141.

5.5 The bun shall also conform to the requirements given in Table 1.

TABLE 1 - Requirements for bun

Sl. No. (1)	Characteristic (2)	Requirement (3)	Method of test Ref. to Appendices of SLS 141 (4)
i	Total solids content,* per cent by mass, min.	70.0	C
ii	pH	5.3 to 6.0	D
iii	Acid insoluble ash, per cent by mass on dry basis, max.	0.1	E
iv	Crude fibre, per cent by mass on dry basis, max.	0.25	F

**Total solids content* = 100 - *water content*

6 PACKAGING

The buns shall be packed in suitable non-toxic wrapper to preserve their freshness.

7 MARKING

The following particulars shall be marked legibly and indelibly on each pack of bun; marking shall be in non-toxic and non-transferable ink:

a) The word *Bun*;

b) Net mass, in g; and

c) Name and address of the manufacture **and/or** registered trade mark.

8 SAMPLING

8.1 Lot

All the buns in a consignment belonging to the same batch of manufacture shall constitute a lot.

8.2 General requirements of sampling

8.2.1 The samples shall be placed in clean and dry sample containers such as polythene bags and glass bottles and shall be stored in such a manner that the material is not unduly affected.

8.2.2 Each container containing the samples shall be selected air tight and marked with necessary details of sampling.

8.2.3 Samples shall be tested within 36 hours of sampling.

8.3 Scale of sampling

8.3.1 Samples of buns shall be tested from each lot for ascertaining their conformity to the requirements of this specification.

8.3.2 The number of buns to be selected for sampling shall be in accordance with Column 1 and Column 2 of Table 2.

TABLE 2 - Scale of sampling

Number of buns in the lot (1)	Number of buns to be selected (2)	Size of the sub-sample (3)
Up to 200	10	3
201 to 600	15	4
601 to 1 000	18	5
1 001 to 1 800	20	7
1 801 and above	25	10

8.3.3 Buns shall be selected at random. In order to ensure randomness of selection, random number tables as given in **SLS 428** shall be used.

8.4 Number of tests

8.4.1 All buns selected as in **8.3.2** shall be inspected for visual characteristics. Each bun shall be tested for volume and each bun shall also be weighed individually and the mass recorded.

8.4.2 After inspecting for visual requirements, a sub sample of size as given in Column 3 of Table 2 shall be drawn and each of the buns in the sample shall be cut diagonally.

8.4.2.1 One of the portions of every bun shall be taken. Portions so obtained shall be reduced to small pieces and mixed together so as to form a composite sample. The test for determination of pH, acid insoluble ash and crude fibre shall be conducted on the composite sample.

8.4.2.2 The remaining portions of buns shall be tested individually for total solids content.

9 METHODS OF TEST

Tests shall be carried out as prescribed in the appropriate appendices given in Table 1.

10 CONFORMITY TO STANDARD

The lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied.

10.1 Each bun inspected as in **8.4.1** satisfies the relevant requirements.

10.2 The test results on the composite sample satisfy the relevant requirements.

10.3 Each sample tested as in **8.4.2.2** satisfies the relevant requirements.

SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the national standards organization of Sri Lanka established by the Sri Lanka Standards Institution Act No. 6 of 1984 which repeals the Bureau of Ceylon Standards. Act No. 38 of 1964. The Institution functions under the Ministry of Industries and Scientific Affairs.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and from other services. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The detailed preparation of standard specifications is done by Drafting Committees composed of experts in each particular field assisted by permanent officers of the Institution. These Committees are appointed by the Divisional Committees, which in turn are appointed by the Council. All members of the Drafting and Divisional Committees render their services in an honorary capacity. In preparing the standard specifications, the Institution endeavours to ensure adequate representation of all view points.

In the international field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

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