#### SRI LANKA STANDARD 543: 1981

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# METHODS OF SAMPLING FOR FOOD COLOURS

**BUREAU OF CEYLON STANDARDS** 



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SLS 543 : 1981

Gr. 4

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BUREAU OF CEYLON STANDARDS
53, Dharmapala Mawatha,
Colombo 3,
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This Standard does not purport to include all the necessary provisions of a contract.

SLS 543 : 1981

## SRI LANKA STANDARD METHODS OF SAMPLING FOR FOOD COLOURS

#### FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Bureau of Ceylon Standards on 1981-11-26 after the draft, finalized by the Drafting Committee on Food Additives had been approved by the Agricultural and Food Products Divisional Committee.

This standard is applicable for sampling of all the food colours and is subject to the Ceylon Food and Drugs Act, No. 25 of 1949 and the regulations framed thereunder wherever applicable.

All values given in this standard are in SI units.

For the purpose of deciding whether a particular requirement of this standard 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 standard.

The assistance gained from publications of the Indian Standards Institution in preparation of this standard is gratefully acknowledged.

#### 1 SCOPE

This standard prescribes the general requirements of sampling and scale of sampling for food colours. It also includes the preparation of test and referee samples and method of retesting of the samples taken.

#### 2 REFERENCES

CS 102 Presentation of numerical values

SLS 428 Random sampling methods

#### 3 SAMPLING

#### 3.1 General requirements of sampling

- 3.1.1 In drawing, preparing, storing and handling test samples, the following precautions and directions shall be observed.
- 3.1.2 The samples shall be taken in a protected place not exposed to damp air, dust or soot.
- 3.1.3 The sampling instrument shall be clean and dry.
- 3.1.4 Precautions shall be taken to protect the sample, the material being sampled, the sampling instrument and the containers for samples from adventitious contamination.
- 3.1.5 To draw a representative sample, the contents of each container selected for sampling shall be mixed as thoroughly as possible by suitable means.
- 3.1.6 The sample shall be placed in clean, dry, air-tight glass containers or other suitable containers on which the material has no action.
- 3.1.7 The sample containers shall be of such a size that they are almost completely filled by the sample.
- 3.1.8 Each sample container shall be sealed air-tight with a stopper after filling, and marked with full details of sampling, date of sampling and batch and code number.
- 3.1.9 The samples shall be stored in such a manner that the temperature of the material does not vary unduly from the normal atmospheric temperature.
- 3.1.10 The sampling shall be done by a person agreed to between the purchaser and the vendor and in the presence of the purchaser (or his representative) and the vendor (or his representative).

#### 3.2 Scale of sampling

#### 3.2.1 Lot

- All the containers in a single consignment of the material drawn from a single batch of manufacture shall constitute a lot. If a consignment is declared or known to consist of different batches of manufacture, the containers belonging to the same batch shall be grouped together and each such group shall constitute a separate lot.
- 3.2.1.1 The sample shall be tested for each lot for ascertaining the conformity of the material to the requirements of the specification.

3.2.2 The number (n) of containers to be selected from the lot shall depend on the size of the lot (N) and shall be in accordance with Columns 1 and 2 of Table 1.

TABLE 1 - Number of containers to be selected for sampling

| Lot size (N) | No. of containers to<br>be selected<br>(n)<br>(2) |
|--------------|---|
| (1)          |   |
| 02 to 15     | 02  |
| 16 to 40     | 03  |
| 41 to 65     | 04  |
| 66 to 110    | 07  |
| Over 110     | 10  |

3.2.3 These containers shall be selected at random from the lot and in order to ensure the randomness of selection, a random number table as agreed to between the purchaser and the vendor shall be used (SLS 428). In case a table is not available, the following procedure shall be adopted:

Arrange all the containers in the lot in a systematic manner and starting from any container, count them as 1, 2, 3, .... etc. up to r and so on. Every rth container thus counted shall be withdrawn from the lot to give a sample for test, where

$$r = \frac{N}{n}$$

N being the total number of containers in the lot and n the number of containers to be selected (see Table 1). In case r comes out to be a fractional number, its value shall be taken to be as equal to the integral part of it.

#### 3.3 Test samples and referee sample

#### 3.3.1 Preparation

Draw with an appropriate sampling instrument small quantities of the material from different parts of each container selected according to Table 1. Mix all the portions so drawn thoroughly to form a composite sample weighing not less than 30 g. Divide the composite sample into three equal parts. Each part thus obtained shall constitute the test sample weighing not less than 10 g and shall be sufficient to conduct all the tests. The test

samples shall be transferred immediately to thoroughly clean and dry containers and sealed air-tight. These shall be labelled with the particulars given in 3.1.8.

#### 3.3.2 Test samples for purchaser and vendor

One test sample shall be for the purchaser and one for the vendor.

#### 3.3.3 Referee sample

The third test sample bearing the seals of the purchaser and the vendor shall constitute the referee sample to be used in case of a dispute between the purchaser and the vendor and shall be kept at a place agreed to between the purchaser and the vendor.

#### 3.4 Criterion for conformity

The test results for the various characteristics of the composite samples shall meet the corresponding requirements specified in the standard for that particular food colour.

#### 3.5 Retesting of samples

Should any of the samples first selected fail to pass any of the tests, two further samples from the unopened containers from the same lot shall be selected for retesting. Should these two samples pass the tests, the material represented by the samples shall be deemed to comply with the requirements specified in the standard for that particular food colour. Should either of these samples fail to pass the tests, the material shall be deemed not to comply with the requirements specified in the standard for that particular food colour.

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Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



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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.

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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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