SRI LANKA STANDARD 439:1978
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SPECIFICATION FOR FOOD ADDITIVES—COLOURING MATTERS—PONCEAU 4R

BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR FOOD ADDITIVES
COLOURING MATTERS
PONCEAU 4R

SLS 439 : 1978

Gr. 3

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Sri Lanka.

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 FOOD ADDITIVES COLOURING MATTERS PONCEAU 4R

FOREWORD

This Sri Lanka Standard has been prepared by the Drafting Committee of the Bureau on Food additives. It was approved by the Agricultural and Chemicals Divisional Committee of the Bureau of Ceylon Standards and was authorised for adoption and publication by the Council of the Bureau on 1978-08-18.

This is one of the series of Sri Lanka Standard Specifications for food colours. This standard is subject to the Ceylon Food and Drugs Act No.25 of 1949 and the regulations framed thereunder wherever applicable.

This standard is given 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, shall be rounded off in accordance with CS 102*. The number of figures to be retained in the rounded off value shall be the same as that of the specified value in this standard.

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*CS 102 *Presentation of numerical values.*

The assistance gained from publications of the British Standards Institution is gratefully acknowledged.

1 SCOPE

This Sri Lanka Standard applies to Ponceau 4R for use in the colouring of foodstuffs.

2 REQUIREMENTS

2.1 Composition

The colouring matter shall consist essentially of the trisodium salt of 1-(4-sulpho-1 naphthylazo)-2-naphthol-6: 8-disulphonic acid. In addition to satisfying the requirement of 2.2 and 2.3 of this standard, the colouring matter shall not contain any extraneous matter injurious to health.

2.2 Total dye content

The colouring matter shall contain not less than 82 per cent of total dye when determined by the method described in 2.7 of SLS 394 : 1976* and 4.2 of this standard.

2.3 The colouring matter shall also comply with the limits given in Table 1.

3 SAMPLING

Sampling shall be carried out in accordance with the method prescribed in SLS...**.

SLS 394 : 1976 Methods for analysis of water soluble coal tar dyes permitted for use in foods.

***SLS ... Methods of sampling of food colouring matter (under preparation).*

TABLE 1 - Limits for Ponceau 4R

Item	Characteristic	Limits	Method of test (see Clauses of SLS 394*)
1	Matter volatile at 135 °C per cent by mass, max.	10	2.1
2	Matter insoluble in water per cent by mass, max.	0.1	2.2
3	Matter soluble in di iso propyl ether, per cent by mass, max.	0.2	2.3
4	Subsidiary dyes, per cent by mass, max.	1.0	4.3 of SLS 439 and 2.4
5	Chloride and sulphate, as sodium salts, total per cent by mass, max.	8.0	2.5 and 2.6
6	Copper, mg/kg, max.	10	2.8
7	Arsenic, mg/kg, max.	1.0	2.8
8	Lead, mg/kg, max.	10	2.8
9	Heavy metals, as sulphides, max.	Colour of ref. standard	2.9

*SLS 394 *Methods for analysis of water soluble coal tar dyes permitted for use in foods.*

4 METHOD OF TEST

4.1 Tests shall be carried out in accordance with SLS 394 : 1976*. However the modifications given in 4.2 and 4.3 are to be followed when testing for the requirements given in 2.2 and item 4 of Table 1.

4.2 Modification for the determination of total dye content

For the determination of total dye content, the following reagent and procedure which have not been specified in SLS 394* shall be used.

4.2.1 *Reagent*

Buffer salt : Trisodium citrate dihydrate, 10 g.

4.2.2 *Procedure*

Mass of dye sample : 0.70 g to 0.80 g.
Titration : The dye acts as its own indicator, mass m of dye equivalent to 1.00 ml of 0.2 N titanous chloride solution : 0.03022.

NOTE - This value of m is based on an assumed relative molecular mass of 604.5 for the pure dye.

*SLS 394 : 1976 Methods for analysis of water soluble coal tar dyes permitted for use in foods.

4.3 Modifications for the determination of subsidiary dyes

For the determination of subsidiary dyes the following reagents and procedure which have not been specified in SLS 394* shall be used.

4.3.1 *Reagents*

4.3.1.1 Atmosphere saturating solvent

a)	Ethyl methyl ketone	700 ml
b)	Acetone	300 ml
c)	Water	300 ml

4.3.1.2 Developing solvent-as reagent given in 4.3.1.1.

4.3.1.3 Extracting solvent - a mixture of equal volumes of acetone and water.

4.3.2 *Procedure*

Solvent to ascend full height of paper and development to be continued for 1 hour afterwards.

Conversion factor : F 11.4

5 PACKING

Ponceau 4R shall be packed in suitable containers, which in no way affect the nature and composition of the material within.

The containers shall be strong enough to withstand pressure in handling.

**SLS 394 Methods of analysis of water soluble coal tar dyes permitted for use in fodds.*

6 MARKING

The following particulars shall be marked legibly and indelibly on the label of the container.

a) The words "Ponceau 4R";

b) Registered trade mark (if any);

c) Name and address of the manufacturer;

d) Net mass; and

e) Batch or code number.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

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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SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

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 other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process 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.

Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.