

SRI LANKA STANDARD 470:1979

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**SPECIFICATION FOR
CORRECTING FLUID FOR
DUPLICATING MACHINE
STENCIL**

BUREAU OF CEYLON STANDARDS



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FOR DUPLICATING MACHINE STENCIL


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Gr. 4

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



SRI LANKA STANDARD
SPECIFICATION FOR CORRECTING FLUID,
FOR DUPLICATING MACHINE STENCIL

FOREWORD

This Sri Lanka Standard was authorised for adoption and publication by the Council of the Bureau of Ceylon Standards on 1979-12-21, after the draft, finalised by the Drafting Committee on Correcting Fluid, had been approved by the Agricultural and Chemicals Divisional Committee.

The standard values in 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 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 publications of the Indian Standards Institution and the United States Federal Supply Service, General Services Administration is gratefully acknowledged.

*CS 102 *Presentation of numerical values.*

1 SCOPE

This specification prescribes the requirements and the methods of sampling and test for correcting fluid used for carrying out corrections on waxless stencil papers.

2 REFERENCES

CS 102 Presentation of numerical values.
SLS 428 Random sampling methods.

3 REQUIREMENTS

3.1 Description

The material shall be tinted to make it visible where it has been applied. It shall adhere perfectly to the stencil paper and shall not show any strike-through, nor shall it have any smearing effect.

3.2 Sediment

The material kept in a closed container, when examined over any period not exceeding two years from the month of production shall show no sediments or deposits either at the bottom or on the sides of the container.

3.3 Clarity

The material shall be a clear solution and, when applied evenly on a stencil paper over an area of about 20 mm x 20 mm and examined against a lighted background, shall show no streaks or hard particles or dots on the surface after it is allowed to dry completely.

3.4 Flow

The material shall flow freely from the brush and shall not clog the bristles of the brush, nor shall it drop as a blob while holding the brush in an upright position.

3.5 Drying properties

The material shall be capable of drying without any tackiness or chalking of the film when applied on a stencil paper and shall satisfy the drying test specified in Appendix B.

3.6 Soluble solids

The material shall contain soluble solids not less than 10 per cent by mass when tested by the method prescribed in Appendix C.

3.7 Thickening and decomposition

The material kept in a closed container, when examined over any period not exceeding two years from the month of production shall not show appreciable signs of thickening or change or any sign of decomposition.

3.8 Performance

The material shall be capable of being easily applied over typewritten areas on a stencil paper and shall permit correction of the treated area without any degradation in clarity or legibility of the typewritten matter on stencilled copies when tested by the method prescribed in Appendix D.

4 PACKING AND MARKING

4.1 Packing

The material shall be packed in glass containers provided with air-tight plastic caps. Each glass container shall be furnished with a brush securely fixed to the cap so as to reach near the bottom of the container.

4.2 Marking

Each container and carton shall be marked with the following information:

- a) Name of the material.
- b) Manufacturer's name, address, and/or recognized trade mark, if any.
- c) Identification mark in code or otherwise to enable the batch of manufacture to be traced from records.
- d) The word "flammable".
- e) Month and year of manufacture.
- f) Net volume of material in ml.
- g) Directions for use and caution after use, to keep the container firmly closed and to store in a cool place.

5 SAMPLING

The method of drawing representative samples of the material shall be as prescribed in Appendix A.

6 TESTS

Tests shall be carried out as prescribed in Appendices B, C and D and the relevant clauses in this specification.

7 CRITERIA FOR CONFORMITY

A lot shall be declared as conforming to the requirements of this specification if each of the test results on the sample selected for testing (see A.3.2) satisfies the relevant requirements of this specification individually.

APPENDIX A

(See 5)

SAMPLING OF CORRECTING FLUID

A.1 GENERAL REQUIREMENTS OF SAMPLING

- A.1.1 In drawing, preparing, storing, and handling test samples, the following precautions and directions shall be observed.
- A.1.2 Samples shall not be taken in an exposed place.
- A.1.3 The sampling instrument shall be clean, and dry, when used.
- A.1.4 Precautions shall be taken to protect the samples, the material being sampled, the sampling instrument and the containers for samples from adventitious contamination.
- A.1.5 To draw a representative sample, the contents of each container selected for sampling shall be thoroughly mixed.
- A.1.6 The samples shall be filled in clean, dry, air-tight glass containers.
- A.1.7 The sample containers shall be of such size that they are almost completely filled by the sample.
- A.1.8 Each sample container shall be sealed air-tight with a stopper after filling and marked with full particulars of the material as given in 4.2 and the date of sampling.
- A.1.9 The sample shall be stored in such a manner that the temperature of the material does not vary unduly from the normal room temperature.

A.2 SCALE OF SAMPLING

A.2.1 lot: In any consignment all the containers from the same batch of manufacture shall be grouped to constitute a lot.

A.2.2 The samples shall be tested from each lot separately for ascertaining the conformity of the material to the requirements of this specification.

A.2.3 The number of containers to be selected from each lot shall be in accordance with Columns 1 and 2 of Table 1.

TABLE 1 Scale of sampling

Number of containers in the lot <i>N</i> (1)	Number of containers to be selected <i>n</i> (2)
Up to 15	2
16 to 50	3
51 to 100	4
101 to 200	5
201 to 300	6
301 to 400	7
401 and above	8

A.2.4 The containers shall be selected at random from each lot. To ensure the randomness of selection, a random number table as specified in SLS 428 shall be used.

A.3 TEST SAMPLES AND REFEREE SAMPLE

A.3.1 Before drawing the samples, the material in the containers chosen as above shall be thoroughly mixed by shaking, stirring or rolling. The samples shall then be drawn with the help of a suitable sampling instrument.

A.3.2 From each of the containers three test samples shall be drawn, the volume of each being sufficient for carrying out all the tests specified in 3. All the test samples thus obtained shall be transferred to sample containers and marked with all the details of sampling (see A.1.8). These samples shall then be separated into three identical sets of test samples in such a way that each set has a test sample representing each container selected. One of these three sets shall be for the testing authority, another for the supplier and the third for the referee.

A.4 NUMBER OF TESTS

Tests for all the requirements of the specification given in 3 shall be conducted on each of the samples in a set.

APPENDIX B

(See 3.5)

TEST FOR DRYING PROPERTIES

B.1 PROCEDURE

B.1.1 Dip the bottom of a glass test tube (of dimension 75 mm x 10 mm) to a depth of 25 mm into the material. Remove and suspend the tube in a vertical position. Examine the upper half of the film at the end of 45 seconds. The test shall be carried out under atmospheric

conditions of 27 ± 2 °C and a relative humidity of 65 ± 5 per cent.

B.1.2 The material shall conform to the requirements of the test if the film has dried without tackiness or chalking.

APPENDIX C

(see 3.6)

TEST FOR SOLUBLE SOLIDS

C.1 PRINCIPLE

Total solids are determined by evaporating the material to dryness.

C.2 PROCEDURE

Weigh to the nearest 0.1 g, about 5 g of the material in a clean, dry and tared porcelain dish. Evaporate the material on a hot water bath at 80 °C to 85 °C till the material forms a uniform thin film in the bottom of the dish. Take care to avoid any loss of contents. Continue heating on the water bath till the material is apparently dry. Place the dish and contents in an air-oven maintained at 105 ± 2 °C for about one hour. Cool the dish in a desiccator and weigh. Repeat the operation till constant mass is obtained.

C.3 CALCULATION

$$\text{C.3.1 Total solids, per cent by mass} = \frac{100 (m_2 - m_1)}{m}$$

where,

m_2 = mass, in g, of the residue and the dish,

m_1 = mass, in g, of the empty dish, and

m = mass, in g, of the material taken for the test.

APPENDIX D

(See 3.8)

TEST FOR PERFORMANCE

D.1 PROCEDURE

D.1.1 Type two lines of capital 'B' using single spacing between lines, and type three lines of the word 'stencil' using a single space between words and single spacing between lines. Lift the stencil free of carbon paper or backing sheet by means of a pencil or ruler and using a single application of the material, treat one fourth of the typewritten matter, portioning out the test area over the entire stencil. Allow the material to dry for one minute, and re-type substituting 'J' for 'B' and 'uniform' for 'stencil'. Remove the cushion sheet (which should be capable of being suitably separated from the stencil). Place the stencil in a duplicating machine and prepare 1000 copies. Examine several of the final copies.

D.1.2 Remove stencil from the duplicating machine and replace the stencil on the machine after ten minutes. Prepare 25 copies. Examine the last copy.

D.1.3 The material shall conform to the requirements of the test if the corrected areas of the copies examined as specified in D.1.1 and those of the last Copy examined as specified in D.1.2 are equal in clarity and legibility to the typewritten matter.

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