

SRI LANKA STANDARD 466 Part 12:1980
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SPECIFICATION FOR
PLANT PROTECTION PRODUCTS
PART 12 - DODINE

BUREAU OF CEYLON STANDARDS

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SLS 466:Part 12:1980

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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.

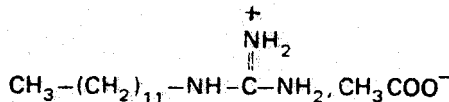
SRI LANKA STANDARD
 SPECIFICATION FOR PLANT PROTECTION PRODUCTS
 PART 12 : DODINE

FOREWORD

This Sri Lanka Standard Specification was authorised for adoption and publication by the Council of the Bureau of Ceylon Standards on 1980-10-31, after the draft finalised by the Drafting Committee on Pesticides, has been approved by the Agricultural and Chemicals Divisional Committee.

All standard values in this specification are in SI units.

Dodine is the accepted common name by the International Organization for Standardization (ISO) for 1 - dodecylguanidinium acetate. The structural formula is,



Wherever possible, standards, for apparatus and common names for pesticides are those approved by the International Standards Organization (ISO).

This standard is based on the FAO Specification on Dodine.

Methods of analysis and miscellaneous techniques referred to in this part have been given and adopted by Collaborative International Pesticides Analytical Council Ltd. (CIPAC) and are found in CIPAC Handbook Volume 1 (1970) and Volume 1A (1971).

Information on standard waters for laboratory evaluation of pesticidal formulations will be found in CIPAC Monograph 1, standard waters, and FAO survey of naturally occurring waters (1972). W. Heffer & Sons Ltd., Cambridge, United Kingdom.

Other essential background information could be obtained from *Manual on the use of FAO Specifications for plant protection products*.

1 SCOPE

This part prescribes requirements and methods of test for dodine-technical and dodine dispersible powders.

WARNING

Dodine is toxic. Strict precautions should be taken for the protection of personnel.

SECTION 1 - DODINE TECHNICAL

2 DESCRIPTION

The material shall consist, essentially, of dodine, together with related manufacturing impurities, and shall be a white or nearly white crystalline powder, free from extraneous materials or added modifying agents.

3 ACTIVE INGREDIENT**3.1 Identity** (*Method 101/1/m/1.2; see Note 1*)

It shall comply.

3.2 Dodine (*Method 101/1/m/1.3; see Note 1*)**3.2.1 Minimum content**

Minimum : 97.0 per cent.

3.2.2 Declared content

The dodine content shall be declared and when determined, the content obtained shall not differ from that declared by more than ± 2 per cent.

4 IMPURITIES**4.1 Water** (*See CIPAC I, p. 897, MT/30*)

Maximum 1.0 per cent.

5 PACKAGING AND MARKING

The containers shall comply with the requirements stipulated in SLS ... Packaging and marking of pesticide containers.

SECTION 2 - DODINE DISPERSIBLE POWDERS

6 DESCRIPTION

The product shall consist of a homogeneous mixture containing technical dodine as the only active ingredient, together with suitable fillers and any necessary formulants. It shall be a fine powder, free from visible extraneous materials and hard aggregates.

It shall be formulated from dodine of quality complying with the specification for *Dodine Technical*.

7 ACTIVE INGREDIENT

7.1 Identity (*Method 101/3/m/1.2 ; see Note 1*)

It shall comply.

7.2 Dodine (*Method 101/3/m/1.3; see Note 1*)

The dodine content of the product shall be declared and, when determined, the content obtained shall not differ from that declared by more than ± 5 per cent.

8 IMPURITIES

8.1 pH range of aqueous dispersion (*Method 101/3/m/1.4; see Note 1*)

Minimum : 5

Maximum : 9

9 PHYSICAL PROPERTIES

9.1 Wet sieve test (see CIPAC I, p. 981, MT/59.3)

Minimum : Not less than 98 per cent of the product shall pass through a 75- μ m test sieve.

9.2 Suspensibility (see CIPAC I, p. 861, MT/15.1)

A minimum of 70 per cent of the dodine content declared under 6.2 shall be in suspension after 30 minutes in CIPAC Standard Water A, when determined on the product as received and not less than 50 per cent in CIPAC Standard Water C (see Note 3), after the heat stability test.

Alternatively, if the buyer requires other CIPAC Standard Waters to be used, he should specify accordingly when ordering.

9.3 Wettability of the powder (See CIPAC I, p. 967, MT/53.3.1)

It shall be completely wetted in not more than 1 minute without swirling.

9.4 Persistent foam (See CIPAC I, p. 954, MT/47)

Maximum : 25 ml of foam after 1 minute.

10 STORAGE STABILITY

10.1 Heat stability (See CIPAC I, p. 951, MT/46.1.1)

After storage at 54 ± 2 °C for 14 days, the product shall continue to comply with 7.1, 9.1 and 9.3.

11 PACKAGING AND MARKING

The containers shall comply with the requirements stipulated in SLS ... Packaging and marking of pesticide containers.

12 BIOLOGICAL PROPERTIES

12.1 Phytotoxicity*

At the present stage of our knowledge, no tests can be specified to cover phytotoxicity of formulations to crops.

When a certain crop is not specifically mentioned in the instructions for use purchasers should check with the supplier to ensure that the material is suitable, always provided that the proposed use is not restricted or legally forbidden.

12.2 Wetting of crops* (See CIPAC I, p. 965, MT/53.2)

The dilute spray shall satisfactorily wet the leaves of the specified crops when used in accordance with the instructions,

However, owing to wide variations in crops and pests, no specific figures can be assigned to wetting of crops, but this test may prove useful.

* For information

SECTION 3 - SAMPLING AND CRITERIA
FOR CONFORMITY

13 SAMPLING

Representative samples of the material for ascertaining conformity to the requirements of this specification shall be drawn as prescribed in SLS 592 Methods for sampling of pesticidal products.

14 CRITERIA FOR CONFORMITY

The lot shall be considered as conforming to the requirements of this specification if the sample tested as in 13 satisfies all the requirements.

NOTES.

1 Method not included in CIPAC I but will appear in 1A. Pending such publication, copy of method may be obtained on request from the FAO Secretariat.

2 The product may be precipitated by very hard water.

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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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.