SRI LANKA STANDARD 466: PART 15:1983 UDC 632.95

SPECIFICATION FOR PLANT PROTECTION PRODUCTS PART 15—PROPANIL

BUREAU OF CEYLON STANDARDS



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SLS 466: Part 15:1983

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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.

SPECIFICATION FOR PLANT PROTECTION PRODUCTS

PART 15 : PROPANIL

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Bureau of Ceylon Standards on 1983-11-19 after the draft, finalized by the Drafting Committee on Pesticides, had been approved by the Agricultural and Food Products Divisional Committee.

Propanil is the common name accepted by the International Organization for Standardization (ISO) for β , 4 - dichloropropionanilide. The structural formula is

$$CI$$
 CI
 $-NH-CO-C_2H_5$
 $C_9H_9CI_2NO$

This specification is based on the FAO tentative Specification on Propanil.

The methods of analysis and miscellaneous techniques referred to in this part have been developed and adopted by Collaborative International pesticides Analytical Council Limited (CIPAC) and are found in CIPAC handbook Vol. 1 (1970) and Vol. 1A (1980).

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

Wherever possible, standards for apparatus and common names for pesticides are those approved by the ISO.

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

This specification is subject to the provisions of the Control of Pesticides Act No. 33 of 1980 and regulation framed thereunder.

Other essential background information could be obtained from Manual on the use of FAO Specification for Plant Protection Products.

1 SCOPE

This part prescribes requirements and methods of sampling and test for propanil technical and propanil emulsifiable concentrates.

2 REFERENCES

SIS 592 Methods for sampling of pesticidal products

SIS ... Code of practice for packaging of pesticides (Under preparation).

SCETION 1 - PROPANIL TECHNICAL

3 DESCRIPTION

The material shall consist essentially of propanil and may contain related manufacturing impurities, and shall be a brown solid, free from extraneous impurities or added modifying agents.

4 ACTIVE INGREDIENT

4.1 Identity tests (Method 205/1/m/1.2 : see Note 1)

The material shall comply with the identity tests.

4.2 Propanil content (Method 205/1/m/1.3 : see Note 1)

4.2.1 Minimum content

Minimum: 85 per cent

4.2.2 Declared content

The propanil content shall be declared and, when determined, content shall not differ from that declared by more than ± 2.5 percentage units.

5 IMPURITIES

5.1 Acidity (CIPAC 1 page 902 MT 31)

Maximum : 0.3 per cent, calculated as sulfuric acid.

5.2 Water (CIPAC 1, page 897 MT 30)

Maximum: 0.3 per cent.

6 PACKAGING

The containers shall comply with the requirements stipulated in SLS Code of practice for packaging of pesticides (Under preparation).

7 MARKING

The marking on the containers shall be in accordance with the Control of Pesticides Act No. 33 of 1980 and regulations framed thereunder.

SECTION 2 - PROPANIL EMULSIFIABLE CONCENTRATES

8 DESCRIPTION

The product shall consist of an emulsifiable concentrate based on propanil (complying with Section 1,) as the only active ingredient, together with suitable solvents and any necessary formulants. It shall be free from visible suspended matter and sediment.

9 ACTIVE INGREDIENT

9.1 Identity tests (Method 205/5/m/1.2: see Note 1)

Where the identity of the material is in doubt, the identity shall be established with the test.

9.2 Propanil content (Method 205/5/m/1.3: see Note 1)

The propanil content (g/l at 20 $^{\circ}$ C or per cent m/m Note 2) shall be declared and when determined, the content obtained shall not differ from that declared by more than \pm 5 per cent of the declared content.

10 IMPURITIES

10.1 Acidity or alkalinity (CIPAC 1, page 902, MT 31)

Maximum acidity: 0.1 per cent calculated as sulfuric acid.

Maximum alkalinity: 0.3 per cent calculated as sodium hydroxide.

10.2 Water (CIPAC 1, page 897, MT 30)

Maximum: 1.0 per cent.

11 PHYSICAL PROPERTIES

11.1 Emulsion stability (CIPAC 1, page 910, MT 36)

After the stability test at 54 $^{\circ}\text{C}$ (12.2) the product, when diluted at 30 $^{\circ}\text{C}$ (Note 3) with the specified CIPAC Standard Waters, shall comply with the following:

Time after dilution	Limits
0	Initial emulsification : complete
0.5 h	Cream, maximum: 2 ml
2.0 h	Cream, maximum: 4 ml Free oil: 0.5 ml
24.0 h	Re-emulsification : complete
24.5 h	Cream, maximum: 4 ml Free oil, maximum: 0.5 ml

The product shall be tested in Standard Water A and in Standard Water C. Alternatively, if the buyer requires other CIPAC Standard Waters to be used, then this shall be specified when ordering.

11.2* Flash point (CIPAC 1, page 846, MT 12)

The flash point of the product shall not be lower than the minimum declared flash point. The method used for the determination of flash point shall be stated (for example : Abel method) (Note 4).

12 STORAGE STABILITY

12.1 Stability at 0 °C (CIPAC 1, page 930, MI 39)

After storage at 0 \pm 1 $^{\circ}$ C for 7 days the volume of solid or liquid which separates shall not be more than 0.3 per cent.

12.2 Stability at 54 °C (CIPAC 1, page 952, MT 46.1.3)

After storage at 54 \pm 2 $^{\rm O}{\rm C}$ for 14 days the product shall continue to comply with 9.2, 10.1, 11.1 and 12.1.

13 PACKAGING

The containers shall comply with the requirements stipulated in SLS Code of practice for packaging of pesticides (Under preparation).

^{*}For information

14 MARKING

The marking on the containers shall be in accordance with the Control of Festicides Act No. 33 of 1980 and regulations framed thereunder.

-- SECTION 3 - SAMPLING AND CONFORMITY TO STANDARD

15 SAMPLING

- 15.1 Representative samples of the material for ascertaining conformity to the requirements of this specification shall be drawn as prescribed in SLS 592.
- 15.2 Minimum sizes of composite samples to be drawn shall be as given below:
- a) Propanil technical 500 g; and
- b) Propanil emulsifiable concentrates 450 ml.
- 16 CONFORMITY TO STANDARD
- A lot shall be declared as conforming to the requirements of this specification, if the following conditions are satisfied.
- 16.1 All containers selected as in 15.1 conform to the packaging and marking requirements.
- 16.2 The composite sample drawn as in 15.2, when tested, satisfies the requirements given in the relevant section.

NOTES

- 1 Methods of analysis available from FAO Pesticides Control Officer.
- 2 If the customer requires both per cent m/m and g/1 at 20 o C then in cases of despute, the analytical results shall be calculated as per cent m/m.
- 3 Unless another temperature is specified.
- 4 Attention is drawn to the appropriate national and international regulations concerning handling and transport of flammable materials.



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.



SRI LANKA STANDARDS INSTITUTION

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