



**RWANDA
STANDARD**

**DRS
580-3**

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**Cypermethrin Pesticides — Specification
— Part 3: Wettable powders (WP)**

ICS 65.100.10

Reference number

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Foreword

Rwanda Standards are prepared by Technical Committees and approved by Rwanda Standards Board (RSB) Board of Directors in accordance with the procedures of RSB, in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards.

The main task of technical committees is to prepare national standards. Final Draft Rwanda Standards adopted by Technical committees are ratified by members of RSB Board of Directors for publication and gazettment as Rwanda Standards.

DRS 580-3 was prepared by Technical Committee RSB/TC 64, *Pesticides*.

In the preparation of this standard, reference was made to the following standard (s):

- 1) XYZ: Title
- 2) XYZ: Title

The assistance derived from the above source is hereby acknowledged with thanks.

RS 580 consists of the following parts, under the general title *Cypermethrin pesticides — Specification*:

- Part 1: Technical material (TC)
- Part 2: Emulsifiable concentrates (EC)
- Part 3: Wettable powders (WP)
- Part 4: Ultra low volume liquids (ULV)
- Part 5: Technical concentrates (TK)

Committee membership

The following organizations were represented on the Technical Committee on *Pesticides* (RSB/TC 64) in the preparation of this standard.

Rwanda Food and Drugs Authority

Rwanda Forensic Institute

University of Rwanda/College of Sciences and Technology

Standards of Sustainability

CYIRA Ltd

P-TECHNIKS Ltd

Rwanda Inspectorate, Competition and Consumer Protection Authority

Rwanda Investigation Bureau

RAIDORwanda Standards Board (RSB) – Secretariat

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Introduction

A paragraph.

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Cypermethrin Pesticides — Specification — Part 3: Wettable powders (WP)

1 Scope

This Draft Rwanda Standard specifies the requirements for the cypermethrin pesticides in form of Wettable Powders (WP) for plant protection purpose.

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2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

RS 405, *Pesticides — Sampling*

RS 406, *Pesticides — Terminology*

3 Terms and definitions

For the purposes of this standard, the terms and definitions given in RS 406 and the following apply.

4 Requirement

4.1 General requirements

4.1.1 Description

The material shall consist of a homogenous mixture of technical cypermethrin, complying with the requirements of DRS 580-1, together with fillers and any other necessary formulants.

4.1.2 Active ingredient

4.1.2.1 Identify tests

Identity test of the product shall be carried out in accordance with DRS 590, where the identity of the active ingredient is in doubt, then the isolated active ingredient shall comply with at least one additional test.

4.1.2.2 Cypermethrin

The cypermethrin content determination shall be carried out in accordance with DRS 590 and be declared in g/kg and, when determined, the content obtained shall not differ from that declared by more than the following amounts:

Declared content**Permitted tolerance**

Up to 25g/kg	±15% of the declared content
Above 25 up to 100 g/kg	±10% of the declared content
Above 100 up to 250 g/kg	±6% of the declared content
Above 250 up to 500 g/kg	±5% of the declared content

4.1.2.3 Cis-isomer content

The *cis*-isomer content shall be declared and shall be between 40% minimum and 60% maximum of the declared cypermethrin content.

When determined in accordance with DRS 591, the permitted tolerance shall be ± 10% of the declared *cis*-isomer content.

4.2 Specific requirements

Cypermethrin pesticides shall comply with the specific requirements given in Table 1 when tested in accordance with test methods specified therein

Table 1 — Specific requirements for the cypermethrin pesticides

S/N	Parameter	Requirement	Test methods
i.	pH range	4 – 10	Annex A
ii.	Wet test sieve, 75µm, % by mass, max.	2	ES 756
iii.	Suspensibility test; 30 minutes	50%	ES 747
iv.	Persistent foam, after 1 min	25 ml	ES 754
v.	Wetting of the product without swirling	2 min	ES 755
vi.	Storage stability; 54±2°C	95%	ES 753

5 Handling

The cypermethrin pesticides shall be handled in accordance with ES 697

6 Sampling

Samples shall be taken in accordance with ES 694

7 Packaging

The cypermethrin pesticides shall be packed in accordance with ES 695

8 Labelling

The cypermethrin pesticides labelling shall be in accordance with ES 696.

9 Disposal

Disposal of bulk quantities of obsolete pesticides shall be in accordance with ES 700.

10 Marking

Packages manufactured with the requirements of this standard shall bear the Quality Mark upon approval by the responsible authority.

Annex A (normative)

Determination of pH value

A.1 Outline of the method

The pH value of a liquid is determined by means of pH meter and a glass electrode.

A.2 Reagents

A.2.1 Potassium hydrogen phthalate (COOH-C₆H₄-COOK) 0.05 mol/l (0.05M) – Dissolve 10.21 g in freshly boiled distilled water and make up to 1000 ml. do not keep the solution for longer than one month.

A.2.2 Disodium tetraborate (Na₂B₄O₇·10H₂O 0.05M – Dissolve 19.07 g in freshly boiled distilled water and make up to 1000 ml. do not keep the solution for longer than one month.

A.2.3 Water – Freshly boiled and cooled distilled water of pH 5.5 to 7.0

A.3 Apparatus

A.3.1 pH meter

A.3.2 Glass electrode and reference electrode

A.4 Procedure

Operate the pH meter and electrode system in accordance with the manufacturer's instructions. Standardize the meter and electrodes with the 0.05M phthalate (pH 4.00) when an acid solution is being measured or 0.05M borate when an alkaline solution is being measured (see Table B1). The reading should not differ by more than 0.02 pH units from the original value at which the apparatus was standardized. If the difference is greater than 0.05, then repeat the measurements.

Table B1 – pH values of 0.05M disodium tetraborate Temperature, °C	10	15	20	25	30
pH	9.32	9.28	9.22	9.18	9.14

A.5 pH of aqueous dispersion

Weigh 1 g of sample, transfer to the measuring cylinder containing water (about 50 ml), make up to 100 ml with water, and shake vigorously for 1 min. allow any suspension to settle for 1 min and then measure the pH of the supernatant liquid.

Annex B

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Bibliography

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