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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 31270.12-2025

Replacing GB/T 31270.12-2014

**Test guidelines on environmental safety assessment for
chemical pesticides - Part 12: Fish acute toxicity test**

化学农药环境安全评价试验准则 第12部分：鱼类急性毒性试验

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 12 of GB/T 31270 "Test Guidelines for Environmental Safety Evaluation of Chemical Pesticides". GB/T 31270 has been published. The following parts.

- Part 1: Soil metabolism test;
- Part 2: Hydrolysis test;
- Part 3: Photolysis test;
- Part 4: Soil adsorption/desorption test;

- Part 5: Soil leaching test;
- Part 6: Volatility test;
- Part 7: Bioconcentration test;
- Part 8: Water-sediment system metabolism test;
- Part 9: Short-term feeding toxicity test for birds;
- Part 10: Honey bee acute toxicity test;
- Part 11: Silkworm acute toxicity test;
- Part 12: Fish acute toxicity test;
- Part 13: Daphnia acute immobilization test;
- Part 14: Algal growth inhibition test;
- Part 15: Earthworm acute toxicity test;
- Part 16: Soil microbial toxicity test;
- Part 17: Acute toxicity test for natural enemy Trichogramma;
- Part 18: Acute toxicity test for natural enemies and amphibians;
- Part 19: Non-target plant impact test;
- Part 20: Short-term feeding toxicity test for livestock;
- Part 21: Toxicity test for large crustaceans;
- Part 22: Soil surface photolysis test;
- Part 23: Birds acute oral toxicity test.

This document replaces GB/T 31270.12-2014 "Test Guidelines for Environmental Safety Assessment of Chemical Pesticides Part 12. Acute Toxicity to Fish" Compared with GB/T 31270.12-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2014 edition);
- b) Changed terms and definitions (see Chapter 3, Chapter 2 of the 2014 edition);
- c) The principles have been changed (see Chapter 4, Chapter 3 of the 2014 edition);
- d) The test conditions have been changed (see Chapter 5, Table A.1, and 4.1.5, Table A.1 of the 2014 edition);
- e) Added reagent requirements (see 6.1);
- f) The requirements for test organisms have been changed (see 6.2, Appendix A, Table A.1,

and 4.1.1, Appendix A, Table A.1 of the 2014 edition);

g) Added requirements for test containers (see 6.3);

h) The test water requirements have been changed (see 6.4, 4.1.5 of the 2014 edition);

i) Changed the requirements for instruments and equipment (see Chapter 7, 4.1.4 of the 2014 edition);

j) The test material requirements have been changed (see 8.1, 4.1.2 of the 2014 edition);

k) The requirements for the selection of test methods have been changed (see 9.1, 4.2.1 of the 2014 edition);

l) The formal test design requirements have been changed (see 9.3.1, 4.2.3 of the 2014 edition);

m) Added the test solution preparation method (see 9.3.2);

n) The exposure and incubation methods have been changed (see 9.3.3, 9.3.4, and 4.2.3 of the 2014 edition);

o) The observation and measurement methods have been changed (see 9.3.5, 4.2.3 of the 2014 edition);

p) Added concentration detection method (see 9.3.6);

q) Added euthanasia requirements (see 9.6);

r) Added test data collation methods and drawing requirements (see 10.1);

s) The statistical method of test data has been changed (see 10.2, 4.3 of the 2014 edition);

t) The quality control conditions have been changed (see Chapter 11, 4.4 of the 2014 edition);

u) Changed the test report requirements (see Chapter 12, Chapter 5 of the 2014 edition);

v) The classification of acute toxicity of pesticides to fish has been deleted (see Appendix B of the 2014 edition);

w) Added physical and chemical parameter indicators and requirements for test water (see Appendix B);

x) Added a full-length diagram of the fish (see Appendix C).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Pesticide

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2014 as GB/T 31270.12-2014;
- This is the first revision.

Introduction

In order to reduce the impact of pesticide use on the ecological environment and provide data that meets the requirements of pesticide environmental risk assessment, it is necessary to carry out environmental safety assessment.

Tests are conducted to clarify the metabolism, degradation, adsorption, leaching, bioaccumulation and other characteristics of pesticides in the environment as well as their toxicity to non-target organisms.

GB/T 31270 "Guidelines for Environmental Safety Evaluation of Chemical Pesticides" is a test method standard for guiding the environmental safety evaluation of pesticides in China.

It is composed of 23 parts to standardize the pesticide environmental safety evaluation test work and improve the scientificity and comparability of pesticide environmental safety evaluation tests.

- Part 1: Soil metabolism test. The purpose is to clarify the metabolic pathways and metabolic rates of pesticides in soil.
- Part 2: Hydrolysis test. The purpose is to clarify the hydrolysis pathway and hydrolysis rate of pesticides.
- Part 3: Photolysis test. The purpose is to clarify the photolysis pathway and photolysis rate of pesticides.
- Part 4: Soil adsorption/desorption test. The purpose is to clarify the soil adsorption characteristics of pesticides.
- Part 5: Soil leaching test. The purpose is to clarify the leaching of pesticides.
- Part 6: Volatility test. The purpose is to clarify the volatility of pesticides.
- Part 7: Bioconcentration test. The purpose is to determine the bioconcentration of pesticides in fish.