

ICS 65.100
CCS B 15



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

GB/T 31270.7-2025

Replacing GB/T 31270.7-2014

**Test guidelines on environmental safety assessment for
chemical pesticides - Part 7: Bioconcentration test**

化学农药环境安全评价试验准则 第7部分：生物富集试验

Issued on: October 31, 2025

Implemented on: May 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 7 of GB/T 31270, "Test Guidelines for Environmental Safety Evaluation of Chemical Pesticides". GB/T 31270 has been published. The following section.

- 1.Soil Metabolism Test;
- 2.Hydrolysis Test;
- 3.Photolysis Test;
- 4.Soil Adsorption/Desorption Tests;
- 5.Soil Leaching Test;
- 6.Volatility Testing;
- 7.Bioaccumulation Assays;
- 8.Metabolic Experiments of Water-Sediment Systems;
- 9.Short-term feeding toxicity tests in birds;
- 10.Acute toxicity tests on bees;

11.Acute Toxicity Tests on Silkworms;

12.Acute Toxicity Testing in Fish;

1 Scope

GB/T 31270.7-2025 is the Chinese national standard covering how far a pesticide builds up in fish - the flow-through exposure, the uptake and depuration phases, the lipid normalisation, and the bioconcentration factor that decides whether the compound is treated as bioaccumulative. Part 7 of the series. It replaces GB/T 31270.7-2014, under the Ministry of Agriculture and Rural Affairs. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026, replacing GB/T 31270.7-2014.

This document describes bioaccumulation test methods for environmental safety assessment of chemical pesticides, including water exposure and feeding exposure methods. This document applies to bioaccumulation tests conducted for the registration of chemical pesticides, including bioaccumulation tests and bioscale-up tests.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 31270.12 Environmental Safety Evaluation Test Guidelines for Chemical Pesticides - Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 bioconcentration The process by which organisms continuously absorb test substances from water, leading to their gradual accumulation and concentration within their bodies.

Note. Also known as biological concentration.

3.2 biomagnification When organisms ingest food containing the test substance, their concentration in the body becomes higher than that in the food, leading to the transfer and accumulation of the test substance through the food chain. process.

3.3 bioaccumulation The process by which organisms continuously absorb low doses of a test substance from the environment and/or food, leading to its gradual accumulation and concentration in the body.

3.4 semi-static test The method of disinfection involves changing the disinfectant solution at

regular intervals (e.g., 24 hours) during the experiment.

3.5 Flow-through test The method of administering the drug solution was continuously updated during the experiment.

3.6 Spiked diet The bait after adding the test substance in an appropriate manner and mixing it evenly.

7 Bioaccumulation Tests Warning

---Personnel using this document should have practical experience working in a formal laboratory. This document does not address all possible safety issues. Users are responsible for taking appropriate safety and health measures and ensuring compliance with relevant national regulations.

12 Acute Toxicity Tests in Fish

NY/T 4195.3 Environmental Impact Testing for Pesticide Registration - Biological Material Cultivation - Part