

ICS 13.300
CCS A 80



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

GB/T 44396-2024

**Chemicals-Rare minnow (*Gobiocypris rarus*) embryo acute
toxicity test**

化学品 稀有鮡鲫胚胎急性毒性试验

Issued on: August 23, 2024

Implemented on: March 1, 2025

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

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Test substance information	1
5 Test Principles	2
6 Equipment and Materials	2
7 Preliminary preparation for the experiment	3
8 Test procedures	4
9 Quality Control	6
10 Data and Reports	7
Appendix A (Informative) Normal development of rare crucian carp embryos	8
Appendix B (Informative) Test water quality conditions	9
Appendix C (Informative) Reference Figure for Identification of Fish Eggs in Acute Toxicity Test of Rare <i>Gobius crucianus</i> Embryos	10
Appendix D (Informative) 24-well cell culture plate layout	12
References	13

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 is required.

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 and coordinated by the National Technical Committee on Hazardous Chemicals Management Standardization (SAC/TC 251).

This document was drafted by: Shanghai Testing Center, Solid Waste and Chemicals Management Technology Center of the Ministry of Ecology and Environment, and Aquatic Biology of the Chinese Academy of Sciences.

Biological Research Institute, Shenyang Chemical Testing Technology (Nantong) Co., Ltd., Ningbo Customs Technology Center, Suzhou Huace Safety Assessment Technology Service Co., Ltd., Guizhou Jianande Technology Co., Ltd., Institute of Microbiology,

Guangdong Academy of Sciences (Guangdong Microbiological Analysis and Testing Center).

The main drafters of this document are: Chen Xiaoqian, Yang Jing, Zhang Ying, Liu Yanan, Yin Haowen, Liu Hongying, Liu Xiaojian, Wang Jianwei, He Yongfeng, Li Zixuan, Liu Hanwei, Zhang Yuelong, Pi Tianxing, Tian Baolian, Yang Hongbo, Dong Ronggui, Wu Xinying.

Acute toxicity test of chemicals on embryos of *Gobiocypris rare*

1 Scope

This document describes the test method for acute toxicity of chemicals to rare crucian carp embryos, including the required information on the test substance, test principle, instrumentation, and preparation, pre-test preparation, test procedures, quality control, data and reporting.

This document is applicable to testing the acute toxic effects of chemicals on embryos of *Gobiocypris rare*.

2 Normative references

GB/T 27861

3 Terms and definitions

The terms and definitions defined in GB/T 27861 and the following apply to this document.

3.1 Static test

The test is conducted in a way that the test medium is not replaced or flows during the entire test process.

3.2 Semi-static test

A test conducted with the test medium replaced at regular intervals (e.g. 24 h).

3.3 Flow-through test

A test performed in such a way that the test medium is automatically and continuously replaced throughout the test.

3.4 median lethal concentration

The concentration of the test substance that causes mortality in 50% of the tested fish eggs. Note. Expressed as LC50.

3.5 Internal plate control

During the test, the 24-well cell culture plate was used to verify the potential contamination caused by the cell culture plate manufacturer or operator.

The 4 culture wells are designed to minimize risk and any plate effects (such as temperature gradients) that may affect the assay results.

4 Test substance information

The required information for the test substance includes.

- a) CAS number;
- b) structural formula;