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

GB/T 21828-2025

Replacing GB/T 21828-2008

Chemicals - Daphnia magna reproduction test

化学品 大型溞繁殖试验

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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 replaces GB/T 21828-2008 "Chemicals - Tests for the Proliferation of *Daphnia magna*". Compared with GB/T 21828-2008, except for the structure... Aside from adjustments and editorial changes, the main technical changes are as follows:

---The content of "Test Substance Information" has been changed (see Chapter 5, Chapter 3 of the.2008 edition);

---The feeding procedures have been changed (see 8.1.4,.2008 version 8.1.4); pre-tests and limit tests have been added (see

8.1.8 and 8.1.4). 8.1.10); The precautions for setting the concentration range have been changed [see 8.1.9.3, 8.1.8c in the.2008 version];

---Other parameters have been modified (see 8.5,.2008 version 8.5);

---The content of the data and reports has been changed (see Chapter 10, Chapter 10 of the.2008 edition). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Hazardous Chemicals Management (SAC/TC251). This document was drafted by: Solid Waste and Chemicals Management Technology Center, Ministry of Ecology and Environment; Institute of Microbiology, Guangdong Academy of Sciences (Guangdong) (Provincial Microbiology Analysis and Testing Center), Nanjing Institute of

Environmental Sciences, Ministry of Ecology and Environment, Shanghai Testing Center, Shenhua Testing Technology (Nantong) Co., Ltd. The company, Guizhou Jianande Technology Co., Ltd., Guangdong-Hong Kong-Macao Ecological Environment Science Center, and Shanghai Chemical Industry Research Institute Testing Co., Ltd. The main drafters of this document are. Liu Chunxin, Dou Congcong, Mei Chengfang, Liu Hongying, Zhang Ying, Liu Xiaojian, Guo Min, Sun Tian, Yang Di, Tian Zhiyong, and Xu Yujie. Zhao Yazhou, Shu Yaogao, Shi Lili. The release history of this document and the document it replaces is as follows:

---First published in.2008 as GB/T 21828-2008;

---This is the first revision. Chemical propagation test of *Daphnia macrocarpa*

1 Scope

GB/T 21828-2025 is the Chinese national standard on chemicals - *daphnia magna* reproduction test, in the field of environment and health protection, safety. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 5 October 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 February 2026. Classification: ICS 13.300, CCS A80. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document establishes the experimental principles for the reproduction of large *Daphnia* species, and specifies the information on the test subject, experimental preparation, experimental procedures, quality assurance, and quality control. Requirements for quantity control, data and reporting. This document applies to the testing and evaluation of the effects of chemicals that may be exposed to aquatic ecosystems on the reproduction of *Daphnia macrocarpa*.

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 21801 Rapid biodegradability test of chemicals - breathability measurement method

GB/T 21802 Improved MITI test for rapid biodegradability of chemicals (I)

GB/T 21803 Rapid biodegradability test for DOC reduction of chemicals

GB/T 21830 Acute activity inhibition test of daphne in chemicals

GB/T 21831 Test method for rapid biodegradability of chemicals - Closed bottle method

GB/T 21845 Test for water solubility of chemicals

GB/T 21852 Partition coefficient of chemicals (n-octanol-water) - High performance liquid chromatography test

GB/T 21853 Partition coefficient of chemicals (n-octanol-water) - Shake flask test

GB/T 21855 Hydrolysis of Chemicals in Relation to pH

GB/T 21856 Test for rapid biodegradability of chemicals and carbon dioxide generation

GB/T 21857 Improved OECD screening test for rapid biodegradability of chemicals

GB/T 22052 Method for determining the relationship between vapor pressure and temperature and initial decomposition temperature of liquids using a liquid vapor pressure gauge

GB/T 22228 Determination of vapor pressure of solids and liquids of industrial chemicals in the range of 10^{-1} Pa to 10^5 Pa - Static method

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 parent animals The female Daphnia used for reproduction at the start of the experiment.

3.2 offspring The datura produced by the parent datura during the experiment.