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

GB/T 21609-2025

Replacing GB/T 21609-2008

Chemicals - Test method of acute eye irritation/corrosion

化学品 急性眼刺激性/腐蚀性试验方法

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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 replaces GB/T 21609-2008 "Test method for acute eye irritation/corrosion of chemicals" and GB/T 21609- Compared with 2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Modified and added terms and definitions (see Chapter 3, Chapter 3 of the 2008 edition);
- Added a chapter on "Test Principles" (see Chapter 4);
- Deleted "sex and number" (see 4.1.2 of the 2008 edition);
- Change "animal preparation" to "preparation" (see 5.1.2, 4.1.4 of the 2008 edition);
- Reintegrate "test substance", "poisoning procedure" and "test results" into "test procedure" (see 5.2, 4.2, 4.3 and 5 of the 2008 edition);

The requirement that the test substance is a strong acid or a strong base has been deleted (see 4.2.4 of the 2008 edition); the "poisoning step" has been changed to "preliminary test", "final test", "Type test" (see 5.2.4, 5.2.5, 4.3 of the 2008 edition); deleted "local anesthesia" (see 4.3.3 of the 2008 edition); deleted Provisions for "Eye flushing effect test" (see 4.3.4 of the 2008 edition);

- Change "clinical observation" in "test results" to "observation period" and "clinical observation and classification of eye lesions" (see 5.2.6 and 5.2.7, 5.1 of the 2008 edition);
- Change the result evaluation content in "Data and Report" to "Result Evaluation" and delete the result processing method (see Chapter 6, 5.2.2 of the 2008 edition);

- Change "result report" to "test report" and refine the content (see Chapter 7, 5.3 of the 2008 edition);
- Change "Interpretation of test results" to Chapter 8 and simplify the expression (see Chapter 8, 5.2.3 of the 2008 edition);
- Change "Eye Damage Evaluation Standards" to "Eye Damage Grading" (see Appendix A);
- Change "experimental animals" to "laboratory animals" (full text).

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 for Standardization of Hazardous Chemicals Management (SAC/TC251).

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

- First published in 2008 as GB/T 21609-2008;
- This is the first revision.

1 Scope

This document defines the terms and definitions for the test of acute eye irritation/corrosion caused by chemicals in experimental animals, gives the test principles, The test method, result evaluation, content of the test report and interpretation of the test results are determined.

This document applies to the determination of the acute eye irritation/corrosion effects of chemicals.

2 Normative references

GB 14925

GB 30000.20

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 eye irritation

After eye contact with chemicals, the changes caused to the eye are completely reversible.

Note. Chemicals are classified as GHS Category 2, 2A or 2B.

3.2 serious eye damage

Eye contact with chemicals can cause damage to eye tissue or severe physiological vision loss, which is not fully reversible.

Note. Chemicals are classified as GHS Category 1.

3.3 weight-of-the-evidence(assessment)

Weight the pros and cons of the collected information as a basis for drawing conclusions.

Note. No definite conclusion can be drawn from a single data point.

4 Test Principle

A single dose of the test substance was administered to one eye of the experimental animals, and the untreated eye served as a control.

The degree of eye irritation/serious eye damage is assessed by scoring the damage to the iris, cornea, and iris. Other eye reactions and overall The observation period should be sufficient to assess the reversibility or irreversibility of the injury.