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

GB/T 16125-2012

Replacing GB/T 16125-1995

Method for acute toxicity test of *Daphnia magna* straus

大型溞急性毒性实验方法

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Foreword

This standard rule according to GB/T 1.1-2009 given draft. This standard replaces GB/T 16125-1995 "Daphnia magna test standard method", compared with the GB/T 16125-1995 main technical change Of the following.

--- The original standard name "Daphnia magna test standard method" to "Daphnia magna acute toxicity test methods";

--- Original standard subject matter and scope of application to modify the scope and removes Daphnia growth and reproduction of experimental methods (chronic effects);

--- According to GB/T 1.1-2009 restructured, supplemented with "normative references", "Terms and Definitions";

--- The standard

4.2 adds definition and formulation methods standard dilution water;

6.1 This standard sample collection and preservation methods;

--- The standard

7.1 increase in the content and the limits of experimental methods;

--- This standard adds quality control and quality assurance of content and methods;

--- Original Standard Appendix A Appendix A to adjust "culture propagation method Daphnia magna" and Appendix B "Scenedesmus obliquus culture techniques." The use of standard reference redrafted ISO 6341.1996 "Quality - Daphnia magna (Crustacea, Cladocera) activity inhibition assay" establishment, And ISO 6341.1996 is non-equivalent. This standard is proposed and administered by the People's Republic of China Ministry of Health. This standard was drafted. Chinese Center for Disease Control Environmental Health and Related Product Safety. The main drafters of this standard. Liu Fan, Pan Lijun, high Shirong, Wang Jun together. Daphnia magna acute toxicity test method

1 Scope

GB/T 16125-2012 is the Chinese national standard on method for acute toxicity test of daphnia magna straus, 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 20 November 2012 by the Ministry of Health of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2013. Classification: ICS 13.060, CCS C51. 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 standard specifies the Daphnia magna acute toxicity test method. This standard applies to the evaluation of the toxicity of soluble chemicals, the combined toxicity of industrial wastewater and solid waste leachate, wastewater treatment Effects, toxicity of surface water, groundwater and water deposits.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 6682 analytical laboratory use specifications and test methods Technical regulation for design

GB 12997 water sampling program

GB 12998 technical guidance Water Sampling Conservation and management of technical regulations

GB 12999 water sampling sample

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 EC50 median effective concentration EC

50 In the 24h or 48h 50% within the experimental exposure to liquid Daphnia magna activity was inhibited (including death) concentration.

3.2 Immobilisation immobilization Gently shake the test vessel, if within 15s of Daphnia magna can not swim, that its motion was inhibited, even if its tentacles still alive Move, it

should also be counted as individual activities suppressed. Principle

4 This standard is used as experimental biological *Daphnia magna*, *Daphnia magna* into the range of concentrations of the test solution, the counting 24h and 48h *Daphnia magna* live Move was inhibited (including death) the number of computing 24h and 48h EC50 (24hEC50 and 48hEC50), judged the experiment The degree of toxicity of the solution were divided into two phases. the pre-test and formal experiments.

5 Reagents and materials

5.1 General Requirements This standard reagents used were of analytical grade compliance with national standards of chemical reagents, laboratory water requirements with reference to GB/T 6682.