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

GB/T 15670.18-2017

Replacing GB/T 15670-1995

**Toxicological test methods for pesticides registration - Part 18:
Rodent dominant lethal test**

农药登记毒理学试验方法 第18部分：啮齿类动物显性致死试验

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Foreword

GB/T 15670 "Pesticide registration toxicology test method" is divided into the following parts. - Part 1. General; - Part 2. Acute oral toxicity test; - Part 3. Sequential method of acute oral toxicity test; - Part 4. Acute oral toxicity test probability unit method; - Part 5. Acute percutaneous toxicity test; - Part 6. Acute inhalation toxicity test; - Part 7. Skin irritation/corrosivity test; - Part 8. Acute eye irritation/corrosivity test; - Part 9. Skin allergy (sensitization) test; - Part 10. Short-term repeated oral exposure (28 days) toxicity test; - Part 11. Short term repeated percutaneous exposure (28 days) toxicity test; - Part 12. Short-term repeated inhalation exposure (28 days) toxicity test; - Part 13. Subchronic toxicity test; - Part 14. Bacterial response mutations; - Part 15. Micronucleus test of mammalian bone marrow polychromatic erythrocytes; - Part 16. Chromosome aberration test of mammalian bone marrow cells in vivo; - Part 17. Chromosome aberration of spermatogonia/spermatocytes in mammals; - Part 18. Sexual lethal test of rodents; - Part 19. In vitro mammalian cell chromosome aberration test; - Part 20. In vitro mammalian cell gene mutation test; Part 21. Systemic DNA synthesis (UDS) test for mammalian hepatocytes in vivo; - Part 22. DNA damage and repair/programmed DNA synthesis in mammalian cells in vitro; - Part 23. Teratogenic tests; - Part 24. Two generations of reproductive toxicity tests; - Part 25. Acute delayed neurotoxicity test; - Part 26. Chronic toxicity test; - Part 27. Cancer test; - Part 28. Chronic toxicity and carcinogenesis trials; - Part 29. Metabolic and toxic kinetic tests. This part is part 18 of GB/T 15670. This part is drafted in accordance with the rules given in GB/T 1.1-2009. This part of the part of GB/T 15670-1995 "pesticide registration toxicology test method". This part is the main change compared with the marked lethal mutation test part of GB/T 15670-1995 as follows: - to modify and adjust the overall structure of the standard and the format of the arrangement; - Added some chapters (see Chapter 1, Chapter 2, Chapter 3, Chapter 4, Chapter 5, 6.1 and Chapter 8); - modified the requirements for laboratory animals (see 6.4, 14.7.1 of.1995); - modified the contents of the dose and grouping (see 6.3,

14.7.2 of.1995); - modified the content of the exposure (see 6.4, 14.7.3,.1995);

--- modified data processing content (see Chapter 7,.1995 edition 14.7.6). This section is made by the Ministry of Agriculture of the People's Republic of China. This part is headed by the Department of Agriculture and Plant Management of the People's Republic of China. This part of the drafting unit. Ministry of Agriculture Pesticide Testing Institute. This part of the main drafters. Xiao Hang, Central fly, Zhang Liying, Tao Chuanjiang. This part of the previous version of the standard to replace the release of the situation.

--- GB/T 15670-1995. Pesticide registration toxicology test method Part 18. Sexual lethal test in rodents

1 Scope

GB/T 15670.18-2017 is the Chinese national standard on toxicological test methods for pesticides registration - part 18: rodent dominant lethal test, in the field of agriculture. 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 12 July 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, Standardization Administration of China, and has been in force since 1 February 2018. Classification: ICS 65.100, CCS B17. 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 part of GB/T 15670 specifies the basic principles, methods and requirements for rodent animal lethal testing. This section applies to rodent animal lethal tests for pesticide registration.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document. Laboratory Animal Environment and Facilities

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Dominant lethal mutations Occurs in the mutations of spermatogenic cells, does not cause abnormal function of the ligand, but can cause fertilized eggs or embryos in the development of death.

4 Purpose of the test

This test is a germ cell mutagenicity test used to detect the genetic damage to the whole mammalian germ cell, further Confirm the positive results obtained in vitro or other test systems to assess whether the subject can cause dominant lethal mutations.

5 Test Overview

Mammalian development of sperm in the physical or chemical factors, the occurrence of chromosomal damage, so that fertilized eggs died in development. The chromosomal damage caused by dominant lethal is mainly chromosome breakage. The main manifestation of dominant lethal is the loss of the fertilized egg before implantation or implantation of the posterior embryo Fetal early death. The male animals are contacted with the test substance by appropriate means and then mated with uninfected and unassigned female animals. After removing the female animal. Female animals were sacrificed in the second half of gestation, and the uterus was removed and the number of embryos implanted on both sides of the uterus was examined. (Number of implantation), early death, late births and live births. The male animals are separated from another group of non-infected and unassigned women at regular intervals Animals mating, so a few batches to ensure coverage of a sperm cycle.

6 Test method

6.1 preparation of the test substance The test substance is preferably distilled water as solvent, if the test substance is insoluble in water, edible oil (such as corn oil, olive oil, etc.), edible starch, 0.5%