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

GB 24330-2009

**General security technical specification for domestic sanitary
insecticide
(English Translation)**

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1 Scope

This Standard specifies general terms and definitions, requirements, test methods of domestic sanitary insecticide.

This Standard is applicable to general requirements related to health, environmental safety of domestic sanitary insecticide.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable.

For undated references, the latest edition of the referenced document applies.

GB 13917.1~13917.7, Laboratory efficacy test methods and criteria of public health insecticides for pesticide registration

GB/T 17322.1~17322.11, Laboratory efficacy criteria of public health insecticides for pesticide registration

Order of the General Administration of Quality Supervision, Inspection and Quarantine (No.75) - "Measures for the Metrological Supervision and Administration of Quantitatively Packed Commodities"

Order of the Ministry of Agriculture and Rural Affairs of the People's Republic of China [2007] (No.10) - "Pesticide registration information requirements"

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

active ingredient

Chemical composition with biological insecticidal activity.

3.2

efficacy

Under the specified conditions and within the specified time, the effect of repelling (killing) mosquitoes (including flies, cockroaches, ants and so on) the product shall achieve.

3.3

median knockdown time, KT50

Under the specified conditions, the time required for 50% of the test insects to be knocked down (i.e., fall down).

3.4

minimum effective period

The minimum effective time for the use of the traditional Chinese medicine liquid of electrothermal mosquito liquid incense and electric heater.

4.1 Requirements for use of active ingredient

It shall be the medicament that is registered for use in accordance with relevant national regulations.

4.2 Toxicology

It shall meet the toxicological test requirements of the corresponding dosage form in the Order of the Ministry of Agriculture and Rural Affairs of the People's Republic of China [2007] (No.10).

4.3 Active ingredient content and allowable fluctuation range

4.3.1

The content of active ingredients shall be clearly stated on the product packaging.

4.3.2

The allowable fluctuation range of active ingredient content is shown in

Table 1 and the following regulations.

- a) For mosquito coil, cockroach, fly incense and other tobacco preparation products, the allowable fluctuation range of its active ingredient content shall not be higher than 40% of the indicated value and not lower than 20% of the indicated value;
- b) For electrothermal mosquito liquid incense, the allowable fluctuation range of its active ingredient content shall not be higher than 25% of the indicated value and not lower than 10% of the indicated value;
- c) Electrothermal mosquito tablet incense shall be marked (mg/piece). The

5.3 Active ingredient content and allowable fluctuation range

5.3.1

Visual inspection.

5.3.2

The content of active ingredients shall be tested in accordance with the provisions of Annex A, Annex B, Annex C, and Annex D (unlisted dosage form products shall be implemented according to the test methods in relevant national standards).

5.4.1 Sprays, aerosols, small aerosols, mosquito coils, electrothermal mosquito

tablet incenses, electrothermal mosquito liquid incenses, cockroach poison baits shall be tested according to GB 13917.1 ~ 13917.7.

5.4.2 Toxic powder, poison pen and repellent are tested according to GB/T

17322.9 ~ 17322.10.

5.4.3 Unlisted dosage form products are implemented according to the methods in relevant national product standards.

5.5.1 Mosquito coil

Take one coil from the middle of one box of test samples to crush. Pass the

0.154mm (100 mesh/inch) standard sample sieve. Take half of it and seal it in a Teflon reagent bottle (the other half is tested for active ingredient content).

Then place it in a thermostat at $(54 \pm 2)^{\circ}\text{C}$ for 14d. After taking out the sample, test and calculate the degradation rate according to the method for determining the content of active ingredient within 24h.

5.5.2 Electrothermal mosquito tablet incense

The test sample shall be the electrothermal mosquito tablet incense in the same row as before storage. The test sample (with aluminum foil packaging) is placed in a $(54\pm 2)^{\circ}\text{C}$ thermostatic chamber for 14d. After taking out the sample, test and calculate the degradation rate according to the method for determining the content of active ingredient within 24h.

5.5.3 Electrothermal mosquito liquid incense

Take a part of a bottle of test sample as the active ingredient content. Screw the outer cover of the rest part into the original packaging. Then place in a $(54\pm 2)^{\circ}\text{C}$ thermostatic chamber for 14d. After taking out the sample, test and calculate the degradation rate according to the method for determining the content of active ingredient within 24h.

Liquid medicine is poured into a measuring cylinder or weighed with a balance.

Read out the test value (measuring cylinder division value. 0.1mL; balance division value. 0.1g).

5.9.1 Instruments

5.9.1.1

Pressure gauge. range is 0~1.6MPa, accuracy is level 2.5.

5.9.1.2

Special joint.

5.9.1.3

Timer.

5.9.1.4

Constant temperature water bath. temperature control accuracy is $\pm 2^{\circ}\text{C}$.

5.9.2 Test steps

Correctly press the valve actuator according to product description requirements. Eliminate the air trapped in valves and straws. Then place the sample in a $(55\pm 2)^{\circ}\text{C}$ water bath. Immerse the water to four-fifths of the height of the tank. Maintain it at the constant temperature for 30min. Wear thick leather gloves. Remove the sample and dry it quickly. Unplug the valve actuator. Align the pressure gauge inlet with the valve stem. Press hard. After the pressure gauge pointer stabilizes, write down the pressure gauge reading. The maximum value of three measurements shall prevail.