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

**中华人民共和国国家标准**

GB/T 23205-2008

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**Determination of 448 pesticides and related chemicals  
residues in tea—LC-MS-MS method**

**茶叶中 448 种农药及相关化学品残留量的测定  
液相色谱-串联质谱法**

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Standardization Administration of the People's Republic of China (SAC)

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# Determination of 448 pesticides and related chemicals residues in tea—LC-MS-MS method

## 1. Scope

This standard specifies the determination method of liquid chromatography-tandem mass spectrometry (LC-MS-MS) for 448 pesticides and related chemicals residues in green tea, black tea, Pu'er tea and oolong tea (see Annex A and Annex E).

This standard is applicable to qualitative identification for 448 and related chemicals residues in green tea, black tea, Pu'er tea and oolong tea, also is applicable to quantitative determination for 448 pesticides and related chemicals residues.

The detection limit of the method for quantitative determination of 418 pesticides and related chemicals in this standard is 0.03 $\mu$ g/kg - 1.21mg/kg (see Annex A).

## 2. Normative References

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 6379.1 Accuracy (trueness and precision of measurement methods and results - Part 1: General principles and definitions (GB/T 6379.1-2004, ISO 5725-1: 1994, IDT)

GB/T 6379.2 Accuracy (trueness and precision) of measurement methods and results - Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method (GB/T 6379.2-2004, ISO 5725-2: 1994, IDT)

GB/T 6682 Water for analytical laboratory use - Specification and test methods (GB/T 6682-2008, ISO 3696: 1987, MOD)

## 3. Principle

Use acetonitrile for homogenate extraction of the sample, purify it by solid phase extraction column, use acetonitrile + toluene (3 + 1) to elute the pesticides and related chemicals, and use

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