

ICS 59.140.30

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

GB/T 43819-2024

**Leather - Chemical tests - Determination of pesticide residues
content**

皮革 化学试验 杀虫剂残留量的测定

(English Translation)

Issued on: March 15, 2024

Implemented on: October 1, 2024

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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References

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 is modified to adopt ISO 22517:2019 "Determination of pesticide residues in leather chemical tests".

Compared with ISO 22517:2019, this document has many structural adjustments. Comparison table of structural number changes between the two documents See Appendix A.

This document has many technical differences compared to ISO 22517:2019.

A single line (|) is used to indicate these technical differences. A list of these technical differences and their reasons is given in Appendix B.

The following editorial changes were made to this document.

- Changed the expression of the mixed solution volume ratio (see 5.5, 5.6);
- Changed the names of solutions corresponding to different concentrations (see 5.8, 5.9);
- Changed the concentration unit of the standard working solution (see 5.10 and 8.3.1);
- Changed the names of some article titles (see Chapter 8);
- Changed the expression method of relative ion abundance range (see 8.6);
- Added notes on GC-MS analysis (see 8.6);
- Added formula numbering (see Chapter 9);
- Changed the ranking of various pesticides (see Appendix C);
- Added the header names in the appendix (see Appendix C, Appendix E, Appendix F and Appendix H);
- Changed the data source of "precision of the method" and added the numbers of various pesticides (see Appendix H);
- Changed the data presentation of "method recovery" (see Appendix I).

This document was proposed by China Light Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Standardization of Leather Industry (SAC/TC252).

Introduction

Pesticide residues in leather mainly come from animal breeding and raw leather preservation processes, and enter the leather through human skin contact or after disposal.

The soil then enters the human body through the food chain.

According to the ISO/T R16178 Technical Report, there may be 20 pesticides in leather that are harmful to human health and the environment, including DDT.

Ten pesticides, including DDT, lindane, and endosulfan, have been listed in the Stockholm Convention on Persistent Organic Pollutants (POPs Convention).

It is a banned organic pesticide. Its residue is easy to accumulate, migrate, and resist degradation. Once it enters the human body, it can cause cancer, teratogenesis, mutagenesis, and endocrine disruption.

The hazards have attracted wide international attention.

At present, the international community has formed a method standard for the determination of pesticide residues in leather, but my country has not yet developed relevant standards.

Quality control in production and trade has brought certain difficulties.

product quality, protect consumers and environmental safety, strengthen market safety supervision and environmental protection, standardize market order, and evaluate the leather industry's long-term prevention and control it is urgent to improve the effectiveness of prevention and control measures for toxic organic pollutants, accelerate scientific research and technical exchanges and cooperation, and promote green development of the industry.

Set standards to meet industry needs.

The issuing agency of this document draws attention to the fact that claims of compliance with this document may involve the use of patents related to the test procedures in Chapter 8.

The issuing organization of this document takes no position on the authenticity, validity and scope of this patent.

The patent holder has promised to the issuing agency of this document that he is willing to cooperate with any applicant under reasonable and non-discriminatory terms and conditions.

The patent holder's statement has been filed with the issuing authority of this document.

The following contact information is obtained.

Name of patent holder. Quanzhou Customs Comprehensive Technical Service Center; Institute of Agricultural Quality Standards and Testing Technology, Fujian Academy of Agricultural Sciences Address. No. 110, South Section of Citong East Road, Fengze District, Quanzhou City, Fujian Province; No. 247, Wusi Road, Gulou District, Fuzhou City, Fujian Province Zip code.362200;350003 Please note that in addition to the above patents, some of the contents of this document may still involve patents. The issuing agency of this document does not assume the responsibility for identifying patents.

responsibility.

Leather chemical test - Determination of pesticide residues Warning. Some pesticides may be potentially harmful to humans. Any handling and disposal of such substances should be strictly in accordance with applicable health regulations.

The test should be carried out in accordance with health and safety requirements; good laboratory operating practices should be followed and necessary safety measures should be taken during the test.

1 Scope

This document describes a test method for the determination of 24 pesticide residues in leather by gas chromatography-mass spectrometry (GC-MS).

This document applies to the determination of pesticide residues in various types of leather and their products.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 39364 Sampling locations for chemical, physical, mechanical and colour fastness tests on leather (GB/T 39364-2020, ISO 2418.

2017,MOD)

QB/T 2716 Preparation of leather chemical test samples (QB/T 2716-2018, ISO 4044:2008, MOD)