

ICS 59.140.10

CCS Y 46



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

GB/T 38411-2019

**Leather chemicals - Determination of the free formaldehyde in
leather process auxiliaries**

Issued on: December 31, 2019

Implemented on: July 1, 2020

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

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to modify the use of ISO 27587..2009

Determination ".

Compared with ISO 27587..2009, this standard has more structural adjustments. Appendix A gives the standard and ISO 27587..2009.

List of chapter number comparisons.

There are technical differences between this standard and ISO 27587..2009. Appendix B gives a list of corresponding technical differences and their causes.

The following editorial changes have been made to this standard.

--- The standard name was revised to "Determination of free formaldehyde in leather chemicals and leather processing auxiliaries", more in line with China's standardization system;

--- Removed informative appendix A.

This standard is proposed by the China Light Industry Federation.

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

This standard was drafted. Sichuan University, Sichuan Tingjiang New Materials Co., Ltd., Zhejiang Shenghui Chemical Co., Ltd., China Leather Shoes

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1 Scope

This standard specifies the determination method of free formaldehyde in leather processing aids.

This standard applies to the determination of free formaldehyde in various leather processing aids.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 6682 Analytical laboratory water specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD)

3 terms and definitions

The following terms and definitions apply to this document.

3.1

Freeformaldehyde

When the sample is heated in a dry, inert environment, the formaldehyde released under dynamic conditions.

4 Principle

After the sample is heated in an inert environment for a specific time, the released formaldehyde is collected and reacted with 2,4-dinitrophenylhydrazine (DNPH) to produce

Formaldehyde and gadolinium were quantitatively determined by reversed-phase high performance liquid chromatography at specified wavelengths.

5 Reagents and materials

5.1 General requirements. Unless otherwise specified, all reagents used are of analytical

grade.

The used solutions are all aqueous solutions.

5.4 concentrated phosphoric acid (85%).

5.5 2,4-dinitrophenylhydrazine (DNPH) solution, 0.3g DNPH was dissolved in 100mL concentrated phosphoric acid (5.4).

5.6 Absorption liquid, prepare DNPH solution (5.5), acetonitrile (5.2) and water (5.3) according to the volume ratio of 1. 8. 11.

6 Instruments and equipment

6.1 Oil bath with stirring device, the temperature is constant at (90 ± 3) degrees C, and its depth should ensure that the U-shaped tube is immersed in oil.