

ICS 59.140.01

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

SN/T 1654-2005

**Determination of 2, 3, 5, 6-tetrachlorophenol residues in leather
and leather products for import and export. Acetylation gas
chromatography**

进出口皮革及皮革制品中2, 3, 5, 6-四氯苯酚残留量的测定 乙酰化气相色谱法
(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Method summary
4 Reagents
4.4 Sulfuric acid ($\rho=1.84\text{g/cm}^3$)
5 Instruments and equipment

Foreword

Appendix A of this standard is an informative annex.

This standard is proposed and managed by the National Certification and Accreditation Administration.

This standard was drafted. Zhejiang Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China.

1 Scope

This standard specifies the method for determination of 2,3,5,6-tetrachlorophenol and its salts in leather and leather products.

This standard applies to the determination of 2,3,5,6-tetrachlorophenol and its salts in various leathers and their products.

2 Normative references

The terms in the following documents become the terms of this standard by reference to this standard. All dated references, followed by all Modifications (not including errata content) or revisions do not apply to this standard, however, parties to agreements based on this standard are encouraged to study if it is possible to use the latest version of these files? For undated references, the latest edition applies to this standard.

GB/T 6682 Analytical laboratory water specifications and test methods QB/T 3812.1
Leather laboratory sample parts and signs QB/T 3812.2 Air conditioning of leather physical property test strips

3 Method summary

The 2,3,5,6-tetrachlorophenol and its salts remaining in the leather are extracted into the aqueous phase by forming a potassium salt in the potassium carbonate solution, and the extract is acidified.

After that, it was back extracted with n-hexane. After purification, it is extracted with a potassium carbonate solution to the aqueous phase. Add acetic anhydride to form 2,3,5,6-tetrachlorophenol ethyl ester, Finally, it is extracted with n-hexane. Determined by gas chromatography electron capture detector and quantified by internal standard method.

4 Reagents

Unless otherwise stated, the distilled or deionized water used in this standard shall meet the requirements of GB/T 6682 Class III water.

4.1

Potassium carbonate. analytically pure.

4.2

Potassium carbonate solution. 0.1 mol/L, 13.8 g of potassium carbonate was dissolved in 1000 mL of distilled water.

4.3

n-hexane. analytically pure.

4.4 Sulfuric acid ($\rho=1.84\text{g/cm}^3$)

3). Analytical purity.

4.5 Acetic anhydride. analytically pure.

4.6 2,3,5,6-tetrachlorophenol standard. purity >99%.

4.7 Standard stock solution of 2,3,5,6-tetrachlorophenol. 100 $\mu\text{g/mL}$, prepared with 0.1 mol/L potassium carbonate solution.

4.8 Aldrin internal standard solution. prepared with n-hexane at a concentration of about 0.05 $\mu\text{g/mL}$.

5 Instruments and equipment

5.1

Gas Chromatograph. equipped with an electron capture detector.

5.2

Constant temperature oscillating water bath.

5.3

Vortex mixer.

5.4

Centrifuge.

5.5

Erlenmeyer. 100 mL with a ground plug.

5.6

Glass core funnel. No. 2.

5.7

Micro-syringe. 10 μ L, 100 μ L each.