

ICS 67.080.10
CCS X 24

SN

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

SN 0159-1992

Replacing SN 0159-1992

**Determination of BHC, DDT, aldrin, dieldrin and heptachlor
residues in fruits for export. Gas chromatography method**

出口水果中艾氏剂、狄氏剂、七氯残留量检验方法

(English Translation)

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Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Method summary
- 4 Reagents and materials

Foreword

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

This standard replaces SN 0159-1992 "fruit for export aldrin, dieldrin, heptachlor residues in." this standard compared with SN 0159-1992, in addition to editorial changes outside the main technical amendments are as follows;

--- Modify the standard name; the "test method" to "measured"; the name of increased "BHC", "DDT", "GC";

--- Standard Scope adds orange, apple;

--- Original standard "2 sampling and sample preparation" to "6 Sample preparation and preservation";

--- Modify the original sample before standard processing methods; the column to commodity SPE column (TPT);

--- Original criteria used to fill the column capillary column.

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

This standard was drafted. People's Republic of China Jiangxi Exit Inspection and Quarantine.

1 Scope

This standard specifies the BHC and DDT, aldrin, dieldrin and heptachlor determination of residues in fruits for export.

This standard applies to oranges, navel oranges, apples BHC, DDT, aldrin, dieldrin and heptachlor residues determination.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Laboratory use specifications and test methods GB/T 6682 Analysis

3 Method summary

Sample residual BHC and DDT, aldrin, dieldrin, heptachlor with acetone - petroleum ether extract by solid phase extraction (SPE), with Equipped with electron capture detector of gas chromatography, internal standard.

4 Reagents and materials

Except where noted, all reagents were of analytical grade water as a water line with GB/T 6682 regulations.

4.1

acetone. HPLC grade.

4.2

petroleum ether. boiling range 30 °C ~ 60 °C.

4.3

hexane. HPLC grade.

Ethyl acetate 4.4. HPLC grade.

4.5

acetone - petroleum ether (14 volume). Measure 20mL of acetone and 80mL of petroleum ether, and mix.

4.6

ethyl acetate - n-hexane (19 volume). the amount of 10mL and 90mL ethyl acetate, n-hexane, and mix.

4.7

standards organochlorine pesticides. aldrin, dieldrin, heptachlor, alpha- BHC, beta- BHC, gamma- BHC, delta- BHC, p, p'- DDE , o, p'- DDT, p, p'- DDD, p, p'- DDT concentration was 100µg/mL, see Appendix A in Table A.1.

4.8

Internal Standard Standard. heptachlor epoxide (Heptachlorepoxyde, CAS number. 1024-57-3), purity $\geq 99\%$.

4.9

internal standard stock solution. accurately weighed amount of heptachlor epoxide standards, with n-hexane formulated into standard stock solution $100\mu\text{g/mL}$ of.

$0\text{ }^{\circ}\text{C} \sim 4\text{ }^{\circ}\text{C}$ dark preservation, valid for one year.

4.10

intermediate mixed standard solution. Pipette appropriate amount of standard (4.7), diluted with n-hexane for the component concentration of $5\mu\text{g/mL}$ of mixed standard Intermediate solution. $0\text{ }^{\circ}\text{C} \sim 4\text{ }^{\circ}\text{C}$ stored.

4.11

intermediate internal standard solution. Pipette appropriate amount of internal standard stock solution was diluted with n-hexane at a concentration of $1\mu\text{g/mL}$ of internal standard intermediate solution.

$0\text{ }^{\circ}\text{C} \sim 4\text{ }^{\circ}\text{C}$ stored.

4.12

standard series working solution. Pipette appropriate amount of the intermediate mixed standard solution (4.10), formulated as appropriate diluted concentration of standard series with n-hexane