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

SN/T 1732.17-2015

**Pyrotechnic composition used for fireworks and firecracker.
Part 17: Determination of hexachlorobenzene. Gas
chromatography**

烟花爆竹用烟火药剂 第17部分：六氯代苯的检测方法气相色谱法
(English Translation)

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and Quarantine**

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Foreword

SN/T 1732 "Fireworks for Fireworks and Firecrackers" is divided into 19 parts.

- Part 1. Determination of strontium content;
- Part 2. Determination of dichromate content;
- Part 3. Determination of zinc content;
- Part 4. Determination of copper content;
- Part 5. Determination of titanium content;
- Part 6. Determination of strontium content;
- Part 7. Determination of lead content;
- Part 8. Determination of sodium content;
- Part 9. Determination of magnesium content;
- Part 10. Determination of sulfur content;
- Part 11. Determination of potassium content;
- Part 12. Determination of red phosphorus content;
- Part 13. Determination of boric acid content;
- Part 14. Qualitative detection methods for dextrin;
- Part 15. Method for the detection of polyvinyl chloride;
- Part 16. Determination of picric acid - High performance liquid chromatography;
- Part 17. Method for the determination of hexachlorobenzene; gas chromatography;
- Part 18. Method for the detection of chlorinated paraffin;

--- Part 19. Detection method of gallic acid - High performance liquid chromatography.

This part is the 17th part of SN/T 1732.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

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

This section drafted by. Hunan Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China.

1 Scope

This part of SN/T 1732 specifies the gas chromatographic method for the determination of hexachlorobenzene in fireworks and pyrotechnics.

This section applies to the determination of hexachlorobenzene in fireworks and pyrotechnics.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

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

GB/T 15813 Fireworks and firecracker molding agent sample separation and crushing

3 Method summary

The hexachlorobenzene in the pyrotechnic drug sample is extracted with n-hexane and purified by concentrated sulfuric acid, and the gas equipped with a hydrogen flame ionization detector (FID) is used.

The chromatograph was used for the determination of the retention time and the external standard method for quantification.

4 Reagents and materials

All reagents were of analytical grade unless otherwise stated.

4.1

Hexachlorobenzene standard. purity is 99.5%.

4.2

Concentrated sulfuric acid.

4.3

n-hexane. chromatographically pure.

4.4

hexachlorobenzene standard stock solution. accurately weigh the appropriate amount of hexachlorobenzene standard (accurate to 0.0001g), with n-hexane A stock solution of 100 µg/mL was stored at 4 ° C at a low temperature. Dilute to a suitable concentration of standard working solution with n-hexane as needed.

5 Instruments and equipment

5.1

Gas chromatograph with hydrogen flame ionization detector (FID), hydrogen generator.

5.2

Analytical balance.

5.3

Centrifuge. 3000r/min.

5.4

Quick Mixer.

5.5

Multi-functional micro-sampler or other equivalent instrument.

5.6

Scale centrifuge tube. 5mL, 10mL.

5.7

Glass test tube. 10 mL.

5.8

Tip mouth pipette.