

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

SN/T 1017.6-2019

Replacing SN/T 1017.6-2002

**Method for the determination of tecloftalam residues in cereals
for export**

出口粮谷中叶枯酞残留量检测方法
(English Translation)

Issued on: October 25, 2019

Implemented on: May 1, 2020

Issued by: General Administration of Customs

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Foreword

SN/T 1017 is divided into the following nine parts.

- Part 1. Inspection method of cycloheptafen residue in export grain;
- Part 2. Inspection method for methamphetamine residues in exported grain;

- Part 3. Test methods for pentosalone residues in exported grains and vegetables;
- Part 4. Inspection method for pyridzolum residues in oilseeds for export;
- Part 5. Inspection method for fast-killing radon residue in oilseeds for export;
- Part 6. Test method for cumene residue in exported grain;
- Part 7. Determination of Aldicarb, Menadicarb, Xantharcab, Epicarb, and Aphicarb in Export Grains;
- Part 8. Test methods for imidacloprid residues in imported and exported grains by liquid chromatography;
- Part 9. Inspection method for piracetin residues in imported and exported grains.

This section is Part 6 of the Sn/T 1017.

This section is prepared in accordance with the rules given in GB/T 1.1-2009.

This section replaces SN/T 107.6-2002 "Examination Methods for Cucumin Residues in Grains for Export".

Compared with Sn/T 107.6-2002, the main technical changes in this section are as follows.

- Added liquid chromatography-tandem mass spectrometry as the first method;
- The original method was changed to the second method, and some expressions were modified;
- Deleted the sampling step.

This section is proposed and managed by the General Administration of Customs of the People's Republic of China.

This section was drafted. Tianjin Customs, People's Republic of China.

1 Scope

This section specifies the gas chromatography and liquid chromatography-tandem mass spectrometry methods for determination of cumene residues in grains.

The first method in this part applies to the quantitative determination and confirmation of cumene residues in brown rice, wheat, corn, and lentils for export;

The second method in this part is applicable to the quantitative determination of cumene residue in brown rice for export.

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 First method liquid chromatography-mass spectrometry/mass spectrometry

3 Method summary

The sample was immersed in water, and cumene was extracted with methanol, and purified by solid phase extraction. It was detected by liquid chromatography-mass spectrometry/mass spectrometry and quantified by external standard method.

4 Reagents and materials

Unless otherwise specified, the reagents used are of analytical grade, and the water is first-grade water specified in GB/T 6682.

4.1

Methanol. chromatographically pure.

4.2

Formic acid. chromatographically pure.

4.3

Formic acid aqueous solution (0.1%). Absorb 1mL of formic acid, make up to 1L with water, and mix well.

4.4

Diatomaceous earth.

4.5

Luteumphthalein standard substance (Teflocalam, CAS No. 76280-91-6, C₁₄H₅C₁₆NO₃). purity is greater than or equal to 99%.

4.6

Luteumphthalein Standard Stock Solution. Accurately weigh an appropriate amount of Luteumphthalein standard material, and prepare a standard stock solution with a concentration of 1mg/mL with methanol.

Prepare the solution and store it in a refrigerator at -18 ° C.

4.7

Luteumphthalein Standard Intermediate Solution. Accurately absorb an appropriate amount of Luteumphthalein standard stock solution (4.6), prepare a standard intermediate solution with a concentration of 100 µg/mL with methanol, and store in a refrigerator at 0 ° C to 4 ° C.

4.8

Blank sample matrix solution. Select a sample that does not contain the analyte, and follow steps 7.1 and 7.2 to obtain a blank sample matrix solution.

4.9

Luteum phthalate standard matrix solution. As needed, a suitable amount of Luteum phthalate standard intermediate solution (4.7) is pipetted, and a blank sample matrix is used for dissolution.

The solution (4.8) was prepared into a standard matrix solution of appropriate concentration, stored in a refrigerator at 0 ° C to 4 ° C, and prepared before use.

5 Instruments and equipment

5.1

Liquid chromatography-tandem mass spectrometer. equipped with an electrospray ion source.

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5.2

Balance. Sensitivity of 0.1mg and 0.01g.

5.3

Oscillator.

5.4

Food grinder.

5.5

Solid-phase extraction column. Sep-PakC18 (60mg, 3mL), or equivalent. Before use, activate with 10mL methanol and 10mL water in sequence.

5.6

Glass suction filter bottle.

5.7

Erlenmeyer flask. 250mL.