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

GB/T 14454.11-2008

Replacing GB/T 14454.11-1993

**Fragrance/Flavor substances -- Determination of content of
phenols**

香料 含酚量的测定

(English Translation)

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Foreword

GB/T 14454 "spice general test method" consists of the following components.

- Part 1. perfume sample preparation;
- Part 2. spice aroma evaluation method;
- Part 4. Determination of the refractive index of spices;
- Part 5. Determination of optical rotation of spices;
- Part 6. assessment perfume evaporation residue content;
- Part 7. Determination of spices freezing point;
- Part 11. Determination of phenol content of spices;
- Part 12. Determination of trace chlorine spices;
- Part 13. Determination of carbonyl value and carbonyl compounds content;
- Part 14. Preparation of spices standard solution, the test solution and the indicator solution;
- Part 15. Determination of saffron safrone and safrone exclusive content packed column gas chromatography.

This section GB/T Part of 1,114,454.

The partial modification of the use of ISO 1272:2000 "oil phenol content determination." This part of ISO 1272:2000 is the main difference Remove the ISO 1272:2000, sampling methods and repeatability.

This part of the amendment, the main changes GB/T 14454.11-1993 "spice phenol content

determination" is deleted sampling method, Increase the content of the test report.

This part is proposed by the China National Light Industry Council.

This part of the National Fragrance Flavor and Cosmetic Standardization Technical Committee.

This section is responsible for drafting the Shanghai Institute of spices.

1 Scope

GB/T 14454 This part specifies the method for determining the amount of spices phenol by volumetric method.

This section applies to phenols was determined to be the main component of the phenol content of spices.

2 Normative references

The following documents contain provisions which, through reference GB/T 14454 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section. However, under this part are encouraged to reach Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14454.1-2008 perfume sample preparation (ISO 356:1996, MOD) Principle 3 the phenolic compounds contained in a known volume of perfume into a water-soluble basic salts of phenol, and then measure the volume of the perfume is not dissolved.

4 Reagents

Reagents were analytical reagent grade water as distilled water or equivalent purity water.

4.1

tartaric acid, powder.

4.2

potassium-free silica and alumina, 5% (by mass) aqueous solution.

4.3

xylene, non-soluble potassium hydroxide solution (4.2) impurities.

Preparation. add the right amount of potassium hydroxide solution (4.2) in a separatory funnel, shaken, after stratification take the upper xylene spare.

5 Instruments

Usual laboratory equipment, especially the following instruments.

Pipette 5.1, capacity 2mL, 10mL.

5.2

Erlenmeyer flask with a capacity of 100mL.

5.3

aldehyde bottle with a capacity of 125mL or 150mL, neck length 150mm, with 10mL and 0.1mL scale sub-scale. Scale of zero Line should be slightly higher than the bottom of the cylindrical neck, the neck and the vertical angle of the conical wall composed of approximately 30 °.

5.4

boiling water bath.

5.5

glass rod.

5.6

funnel with a capacity of 250mL.

6 Sample preparation

According to GB/T 14454.1 requirements.

To avoid white emulsion during the measurement, it can be used as follows tartaric acid pretreatment.

--- More samples of 10mL, followed by addition of tartaric acid (4.1), added in an amount of 0.02g/mL.

--- Shaken vigorously, but not filtered according to GB/T 14454.1-2008 provisions in 5.1.3 with magnesium sulfate.

7 Procedure

By draw 10mL sample preparation (see Chapter 6) containing about 75mL of potassium hydroxide solution (4.2) aldehyde bottle with a pipette (5.1)