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

GB/T 14455.7-2008

Replacing GB/T 14455.7-1993; GB/T 14455.8-1993; GB/T 14457.6-1993; GB/T 14457.8-1993

**Fragrance/Flavor substances -- Determination of ester value
after acetylation and evaluation of free alcohols and total
alcohols content**

香料 乙酰化后酯值的测定和游离醇与总醇含量的评估

(English Translation)

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Foreword

GB/T 14455 "spice general test method" consists of the following components.

- Part 1. Oil nomenclature;
- Part 3. spices dissolved in ethanol (mixed) to assess the degree;
- Part 5. Determination of acid value spices or acid content;
- Part 6. Determination of perfume ester value or ester containing an amount;
- Part 7. Determination of ester value assessment and the free alcohol and perfume total alcohol content after acetylation.

This section GB/T 14455 Part 7.

The partial modification of the use of ISO 1241:1996 "Determination of free alcohols and total alcohol content before and after the oil acetylated ester value assessment" and ISO 3794. 1976 "oils (containing tertiary alcohols) assessment of free alcohol content was measured after acetylation of ester value." This part of ISO 1241:1996 and ISO 3794. 1976 compared to the main technical differences are as follows.

- Remove the ISO 1241:1996 and ISO 3794. 1976 method of sampling;
- Increased the determination of the amount of alcohol and Appendix Isolate and synthetic fragrances containing A.

This part is the "assessment ester value after acetylation oil Determination of free alcohols and total alcohol content" of GB/T 14455.7-1993, GB/T 14455.8-1993 "essential oils (containing tertiary alcohols) and free alcohol content was measured after acetylation ester value assessment", GB/T 14457.6-1993 "Isolate and synthetic flavors, primary or secondary alcohols Determination acetylation method", GB/T 14457.8-1993 "Isolate and synthetic aroma Determination of material content of tertiary alcohols chloroacetyl - dimethyl aniline "consolidation and revision. This part of GB/T 14455.7 ~ 14455.8-1993, GB/T 14457.6-1993, GB/T 14457.8-1993 compared, mainly to increase the content of the test report.

Appendix A of this section is an informative annex.

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

The first part of the method of the present GB/T 14455 requirements by measuring the presence of sodium acetate, acetylated with acetic anhydride ester samples before and after Value assessment methodology oil free alcohol and determination of the total alcohol content Isolate and synthetic fragrances containing alcohol content.

This method does not apply to oils containing more tertiary alcohols (such as linalool and terpineol), tertiary alcohols because tertiary alcohol can not be fully acetylated; nor Contains more suitable phenols, lactones, aldehydes, ketones and easy enolate oils, because in addition to the free alcohol, these components will also be acetylated.

GB/T 14455 in the second part of the provisions of this law by measured at N, N-dimethylaniline, with acetyl chloride and acetic anhydride acetic Acylated ester value before and after the samples to assess the essential oil free alcohol content and method of determination Isolate and synthetic fragrances containing alcohol content.

This method is applicable to oils contain significant amounts of tertiary alcohols (such as linalool and terpineol), tertiary alcohols, does not apply to contain significant amounts of phenols, anthranilic Benzoic acid esters, lactones, aldehydes, oils and primary alcohols, secondary alcohols.

2 Normative references

The following documents contain provisions which, through reference GB/T 14455 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 perfume sample preparation (GB/T 14454.1-2008, ISO 356:1996, MOD)
Preparation of GB/T 14454.14 spices standard solution, the test solution and the indicator solution GB/T 14455.6 perfume ester value or ester containing an amount of determination (GB/T 14455.6-2008, ISO 709:2001, MOD)

3 Terms and Definitions

The following terms and definitions apply GB/T 14455 in this section.

Ester 1g and spices contained in the release of acid hydrolysis after the desired number of milligrams of potassium hydroxide.

The number of milligrams of potassium carbonate and 1g acetylated spices contained in the release of acid hydrolysis desired.

The first method acetylation Principle 4

4.1 Determination of ester value according to GB/T 14455.6.

4.2 in the presence of sodium acetate, with acetic anhydride acetylation make perfume. After acetylation isolated and dried spices, according to GB/T 14455.6 Determination of ester value.

4.3 Calculation of free alcohol from the front acetylated ester value after acetylation and, combined with the total alcohol content of alcohol.