

Social Organization Standard

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Natural plant essential oils

天然植物精油

(English Translation)



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Foreword

This document is drafted in accordance with the rules set forth in GB/T 1.1–2020 *Directives for Standardization — Part 1: Rules for the Structure and Drafting of Standardizing Documents*.

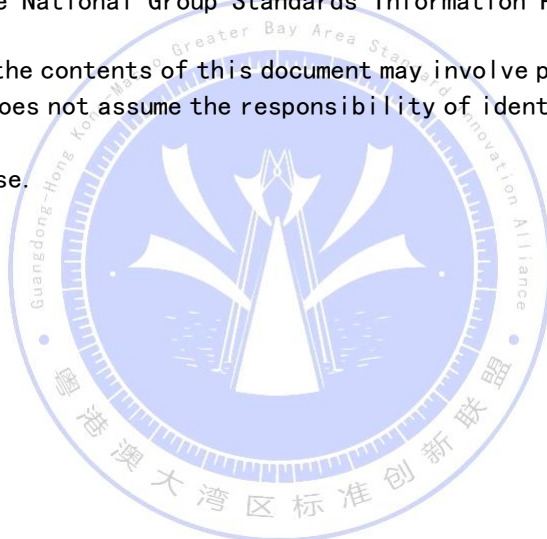
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This is the first release.



Natural plant essential oils

1 Scope

This document specifies the requirements, test methods, inspection rules, marks, packaging, transportation, storage and shelf life of natural plant essential oils.

This document is applicable to a single natural essential oil or a variety of natural plant essential oils from the configuration of the complex essential oil.

2 Normative References

The contents in the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, the reference document with date, only the version corresponding to this date is applicable to this document; For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 191 *Packaging. Pictorial marking for handling of goods*

GB 5296.3 *Instruction for use of consumer products. General labelling for cosmetics*

GB/T 13531.4 *General methods on determination of cosmetics. Determination of relative density*

GB/T 14454.2 *Fragrance/Flavor substances. Method for valuation of odour*

GB/T 14454.4 *Fragrance/Flavor substances. Determination of refractive index*

GB/T 14455.5 *Fragrance/Flavor substances. Determination of acid value or acid content*

GB/T 42172 *Essential oils—General rules for labelling and marking of containers*

QB/T 1684 *Inspecting rules for cosmetics*

QB/T 1685 *Packaging Appearance Requirements for Cosmetic Products*

JJF 1070 *The Rules of Metrological Inspection for Net Content of Prepackaged Commodity with Fixed Content*

Measures for the supervision and administration of the measurement of quantitatively packed commodities (Order No. 75 of the General Administration of Quality Supervision, Inspection and Quarantine)

Provisions on the Administration of Cosmetic Labeling (Order No. 100th of the General Administration of Quality Supervision, Inspection and Quarantine)

Safety and Technical Standards for Cosmetics (2015 Edition)

3 Term and Definition

The following terms and definitions apply to this document.

3.1 Natural essential oil

Essential oils with chemical composition unchanged are extracted from plants by steam distillation, dry distillation, extrusion, cold soaking or solvent extraction.

3.2 Natural compound essential oil

According to the different uses and characteristics of the product, it is a compound essential oil prepared from a variety of (two or more) natural single essential oils.

4 Requirement

4.1 Components requirements

4.1.1 Natural essential oil should meet the requirements of the corresponding standards of the content of the characteristic components.

4.1.2 Natural essential oils do not contain non-natural sources such as acetylene, acetone, methyl alcohol, isoprene, nitriles, heterocycles, ethyl vanillin, methyl- α -ionone, benzdihydropyranone, phenylacetylene, hydrazinobenzene, O-ethoxyphenol, butanone, paratoluenesulfonic acid, benzyl chloride, toluene, xylene, etc. . The raw materials used shall comply with the requirements of *Safety and Technical Standards for Cosmetics*(2015 Edition) . See Annex A.

4.2 Requirements of sensory and physical and chemical indexes of natural essential oil.

Shall comply with the provisions of table 1.

Table 1 Requirements of sensory and physical and chemical indexes of natural essential oil

Item		Index requirements
Sensory index	Appearance	Transparent oily liquid, no foreign body
	colour	Conform to the specified color, consistent with the standard sample.
	odour	Should have the characteristic aroma of the marked plant essential oil, consistent with the standard sample, without peculiar smell.
Physics and Chemistry index	Relative density/ (20°C/20°C)	Rated value $\pm$ 0.01
	Refractive index/ (20°C)	Rated value $\pm$ 0.01
	Acid value/ (mgKOH/g)	$\leq$ 5

4.3 Requirements of sensory and physical and chemical indexes of Natural compound essential oil. Shall comply with the provisions of table 2.

Table 2 Requirements of sensory and physical and chemical indexes of Natural compound essential oil

Item		Index requirements
Sensory index	Appearance	Transparent oily liquid, no foreign body
	colour	Conform to the specified color, consistent with the standard sample.
	odour	Should have the characteristic aroma of the marked plant essential oil, consistent with the standard sample, without peculiar smell.

Item		Index requirements
Physics and Chemistry index	Relative density/ (20°C/20°C)	Rated value $\pm$ 0.01
	Refractive index/ (20°C)	Rated value $\pm$ 0.01
	Acid value/ (mgKOH/g)	≤ 5

4.4 Hygiene index

Shall comply with the provisions of table 3.

Table 3 Hygiene index

Item		Indicator limit
Hygiene index	Total bacterial count/ (CFU/ml or CFU/g)	≤ 1000 (Children and eye products ≤ 500)
	Total of molds and yeasts/ (CFU/ml or CFU/g)	≤ 100
	Coliform bacteria/ (ml or g)	Negative
	Pseudomonas aeruginosa/ (ml or g)	Negative
	Staphylococcus aureus/ (ml or g)	Negative
	Hydrargyrum/ (mg/kg)	≤ 1
	lead/ (mg/kg)	≤ 40
	Arsenic/ (mg/kg)	≤ 10
	Cadmium/ (mg/kg)	≤ 5
	Methyl alcohol/ (mg/kg)	≤ 2000

4.5 Net content

Shall comply with the provisions of Decree No.75 of the General Administration of Quality Supervision, Inspection and Quarantine.

5 Test Method

5.1 Sensory index

5.1.1 Appearance

Take a sample in a colorimetric tube and observe it visually at room temperature and out of direct sunlight.

5.1.2 Color

Take a sample in a colorimetric tube and observe it visually at room temperature and out of direct sunlight.

5.1.3 Odour

Take a sample in a colorimetric tube and observe it visually at room temperature and out of direct sunlight.

5.2 Physical and chemical index

5.2.1 Relative density

According to the method of GB/T 13531.4.

5.2.2 Refractive index

According to the method of GB/T 14454.4.

5.2.3 Acid value

According to the method of GB/T 14455.5.

5.3 Hygiene index

According to the method specified in the Safety and Technical Standards for Cosmetics (2015 Edition)

5.4 Net content

According to the method in JJF 1070.

6 Inspection rule

According to QB/T 1684.

7 Mark, package, transport, storage and shelf life

7.1 Mark

7.1.1 Mark of sales package

Product sales packaging should be marked with the following contents:

- a) Do not use it for pregnant women, infants, hypertension, nephropathy, epilepsy and skin damage. Sensitive person skin, skin test qualified rear can use;
- b) Do not take orally;
- c) Avoid light, seal and store at low temperature;
- d) Should be accompanied by instructions and precautions;
- e) Children's and eye products should have corresponding warning instructions;
- f) The other Marks shall comply with the provisions of GB 5296.3.

7.1.2 Mark of transport package

Label identification shall conform to the requirements of GB/T 42172, and transport packaging identification shall conform to the provisions of GB/T 191.

7.2 Package

The inner packaging of products should be sealed with glass bottles, aluminum cans or ceramic bottles that meet the safety and hygiene requirements and can avoid light, and other products should be implemented according to QB/T 1685.

7.3 Transport

Should be light loading and unloading, no throwing, according to the packing icon signs stacking. Avoid high temperature, violent vibration, impact and sun and rain.

7.4 Storage

It should be stored in a ventilated and dry warehouse with a temperature not higher than 35°C, and should not be close to fire sources, heat sources and water sources. When stored, it should be 20cm away from the ground and 50cm away from the inner wall, with a passage in the middle. Stack them according to the box icon, and do not store them with corrosive or odorous articles,

and strictly grasp the principle of first in first out.

7.5 Shelf life

In accordance with the provisions of the transportation and storage conditions, the product in the case of complete packaging and unopened, the shelf life according to the sales packaging label.



Annex A
(annex normative)

Contents of ingredients of non-natural origin

The natural essential oil should not contain the raw materials in Table A.1.

Table A.1 Contents of ingredients of non-natural origin

Order	English name	Index
1	acetylene	Negative
2	isoprene	Negative
3	phenylacetylene	Negative
4	nitriles	Negative
5	hydrazinobenzene	Negative
6	O-ethoxyphenol	Negative
7	butanone	Negative
8	paratoluenesulfonic acid	Negative
9	benzyl chloride	Negative
10	toluene	Negative
11	xylene	Negative
12	acetone	Negative
13	methyl- α -ionone	Negative
14	methyl alcohol	Negative
15	benzodihydropyranone	Negative
16	Heterocycles	Negative
17	ethyl vanillin	Negative
18	mineral oil	Negative