



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

GB 1886.207-2016

Replacing GB 11958-1989

Food additive -- Oil of cassia

食品安全国家标准 食品添加剂 中国肉桂油

(English Translation)

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Foreword

This standard replaces GB 11958-1989 "Food Additives cinnamon oil." this standard compared with GB 11958-1989, the main changes are as follows.

- Aroma from "China has the characteristic aroma of cinnamon oil" to "cinnamaldehyde similar characteristic aroma";
- Added "feature component content" indicators;
- Remove the "taste" and "heavy metal" technology requirements.

National Food Safety Standard Food Additives China cinnamon oil

1 Scope

This standard applies by steam distillation from the growth in the southern Chinese cinnamon (*Cinnamomum aromaticum* Nees, syn.

Cinnamomum Cassia Nees ex Blume) leaves and/or branches extract food additives Chinese cinnamon oil.

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Light yellow to reddish brown color Liquid state the sample was placed in a cuvette, were visually observed Cinnamic aldehyde aroma similar characteristic aroma GB/T 14454.2

2.2 Physical indicators

Physical and chemical indicators should be consistent with the provisions of Table 2.

Table 2. Physical and chemical indicators

Item Index Test Method the relative density (20 °C/20 °C) 1.052 ~ 1.070 GB/T 11540
Refractive index (20 °C) 1.600 ~ 1.614 GB/T 14454.4 Miscibility (20 °C) 1 volume of the
sample is miscible in 3 volumes of 70% (Volume fraction) ethanol as a clear solution GB/T
14455.3 Acid value (in dollars KOH)/(mg/g) ≤ 15.0 GB/T 14455.5 Carbonyl compound
content (expressed as cinnamic aldehyde) /% ≥ 80.0 GB/T 14454.13-2008 in the first
method Characteristic component content, w /% Trans-cinnamic aldehyde ≥ 74.0

0.5 Coumarin 4

Trans-o-methoxycinnamaldehyde 3-15 Appendix A Appendix A Determination of
characteristic component content A.1 instruments and equipment A.1.1 chromatograph.
According to GB/T 11538-2006 provisions in Chapter 5.

A.1.2 Column. capillary column.

A.1.3 Detector. Hydrogen flame ionization detector.

A.2 Determination

Area normalization method. According to GB/T 11538-2006 10.4 Determination.

A.3 repeatability and results are shown According to GB/T 11538-2006 provisions in 11.4,
shall comply with the requirements.

Food Additives China cinnamon oil gas chromatogram and operating conditions, see
Appendix B.

Appendix B

Food Additives China cinnamon oil gas chromatogram and operating conditions (Area
normalization method) B.1 food additives Chinese cinnamon oil gas chromatogram Food
Additives China cinnamon oil and gas chromatography is shown in Figure B.1.

Explanation.

- 1 --- styrene;
- 2 --- benzaldehyde;
- 3 --- salicylaldehyde;
- 4 --- acetophenone;
- 5 --- phenyl ethyl alcohol;
- 6 --- hydrocinnamaldehyde;

- 7 --- cis-cinnamic aldehyde;
- 8 --- trans-cinnamic aldehyde;
- . 9 --- cinnamon alcohol;
- 10 --- eugenol;
- Coumarin. 11;
- 12 --- cinnamyl acetate;
- 13 --- trans-o-methoxy cinnamic aldehyde;
- 14 --- methoxy cinnamic acid ester.

Figure B.1 food additives Chinese cinnamon oil gas chromatogram

B.2 operating conditions B.2.1 Column. capillary column length 60m, an inner diameter of 0.25mm.

B.2.2 stationary phase. 100% dimethyl polysiloxane.

B.2.3 film thickness. 0.25 μ m.

B.2.4 chromatography oven temperature. linear temperature programmed from 80 °C to 230 °C, the rate of 3 °C/min, and then heated at 230 °C 40min.

B.2.5 Inlet temperature. 250 °C.

B.2.6 detector temperature. 250 °C.

B.2.7 Detector. Hydrogen flame ionization detector.

B.2.8 carrier gas. nitrogen.

Before B.2.9 column pressure. 54kPa.

B.2.10 Injection volume. 0.2 μ L.

B.2.11 Split ratio. 100.1.