



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

GB 1886.204-2016

Replacing GB 8319-2003

Food additive -- Oil of mentha arvensis partially dementholized

食品安全国家标准 食品添加剂 亚洲薄荷素油

(English Translation)

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1 Scope

This standard applies to l- limonene as raw materials by a chemical reaction, or caraway oil as raw material obtained from a single food additive incense d-Celery ketone.

2.1 Chemical Name

d-1- methyl-4-isopropenyl-6-cyclohexyl-2-one Formula 2.2 C₁₀H₁₄O

2.4 Relative molecular mass

150.22 (according to 2007 international relative atomic mass)

3.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Colorless to pale yellow color Liquid state the sample was placed in a cuvette, were visually observed Aroma caraway (caraway) like aroma GB/T 14454.2 GB 1886.205-2016

3.2 Physical and Chemical Indicators

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

Table 2. Physical and chemical indicators

Item Index Test Method Solubility (25 °C) 1mL sample soluble in 5mL60% (volume fraction) ethanol GB/T 14455.3 d- carvone content, w /% >= 95.0 Appendix A Refractive index (20

°C) 1.496 ~ 1.502 GB/T 14454.4 the relative density (25 °C/25 °C) 0.955 ~ 0.960 GB/T 11540 Optical rotation (25 °C) 50 ° ~ 60 ° GB/T 14454.5 GB 1886.205-2016 Appendix A Determination of d- carvone 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 d- carvone gas chromatograph and operating conditions, see Appendix B.
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Appendix B

Food Additives d- carvone gas chromatograph and operating conditions (Area normalization method) B.1 food additives d- carvone gas chromatogram Food Additives d- carvone gas chromatography is shown in Figure B.1.

Figure B.1 food additives d- carvone 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. Polyethylene glycol 20000.

B.2.3 film thickness. 0.25μm.

B.2.4 chromatography oven temperature. 150 °C constant temperature.

B.2.5 Inlet temperature. 250 °C.

B.2.6 detector temperature. 300 °C.

B.2.7 Detector. Hydrogen flame ionization detector.

B.2.8 carrier gas. nitrogen.

Before B.2.9 column pressure. 96kPa.

B.2.10 Injection volume. 0.2μL.

B.2.11 Split ratio. 100.1.