



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

GB 1886.202-2016

Replacing GB 6776-2006

Food additive -- Isoamyl acetate

食品安全国家标准 食品添加剂 乙酸异戊酯

(English Translation)

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Foreword

This standard replaces GB 6776-2006 "food additive iso-amyl acetate." this standard compared with GB 6776-2006, the main changes are as follows.

- Aroma from "having a banana, pear-like aroma" to "fruit, pears, banana-like aroma";
- Isoamyl acetate content of the test method by the packed column gas chromatography to capillary gas chromatography;
- Delete the words "heavy metal content" and "Arsenic content" requirement.

National Food Safety Standard Food Additives isoamyl acetate

1 Scope

This standard applies to acetic acid and iso-amyl alcohol as raw materials by a chemical reaction of a food additive isoamyl acetate.

2.1 Chemical Name

Methyl acetate, butyl acetate, methyl butyl Formula 2.2 C₇H₁₄O₂

2.3 Formula

Methyl acetate, butyl acetate, butyl 2-methyl

2.4 Relative molecular mass

130.19 (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 Color colorless Liquid state the sample was placed in a cuvette, were visually observed Fruity aroma, pear, banana-like aroma GB/T 14454.2

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 3mL60% (volume fraction) ethanol GB/T 14455.3 Isoamyl acetate content, w /% ≥ 95.0 (sum of two isomers) Appendix A Acid value (in dollars KOH)/(mg/g) ≤ 1.0 GB/T 14455.5 Refractive index (20 °C) 1.400 ~ 1.404 GB/T 14454.4 the relative density (25 °C/25 °C) 0.868 ~ 0.878 GB/T 11540 Appendix A Determination of iso-amyl acetate 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 isoamyl acetate gas chromatograph and operating conditions, see Appendix B.

Appendix B

Food Additives isoamyl acetate gas chromatograph and operating conditions (Area normalization method) B.1 food additive iso-amyl acetate gas chromatogram Food Additives isoamyl acetate by gas chromatography is shown in Figure B.1.

Explanation.

1 --- 3-methylbutyl acetate;

2 --- 2-methyl butyl acetate.

Figure B.1 food additive iso-amyl acetate gas chromatogram

B.2 operating conditions B.2.1 Column. capillary column length 30m, an inner diameter of 0.25mm.

B.2.2 stationary phase. 100% dimethyl polysiloxane.

B.2.3 film thickness. 0.32 μ m.

B.2.4 chromatography oven temperature. linear temperature programmed from 50 °C to 220 °C, the rate of 3 °C/min.

B.2.5 inlet temperature. 280 °C.

B.2.6 detector temperature. 280 °C.

B.2.7 Detector. Hydrogen flame ionization detector.

B.2.8 carrier gas. nitrogen.

Before B.2.9 column pressure. 45kPa.

B.2.10 Injection volume. 0.1 μ L.

B.2.11 Split ratio. 100.1.