



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

GB 1886.295-2016

**National Food Safety Standard -- Food Additives - 2, 3, 5,
6-tetramethyl pyrazine**

食品安全国家标准 食品添加剂2,3,5,6-四甲基吡嗪

(English Translation)

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Table of Contents

- 1 Scope
- 2 Chemical name, molecular formula, structural formula and relative molecular mass
 - 2.1 Chemical Name
 - 2.3 Formula
 - 2.4 Molecular Weight
- 3 Technical requirements
 - 3.1 Sensory requirements
 - 3.2 Physical and Chemical Indicators

1 Scope

This standard applies to a diamine and 2,3-butanedione, 2,3,5,6-tetramethylbutyl, or additive for raw materials of food and from the ammonium salts of acetoin Pyrazine.

2.1 Chemical Name

2,3,5,6-methylpyrazine Formula 2.2 C₈H₁₂N₂

2.4 Molecular Weight

136.20 (according to 2007 international relative atomic mass)

3.1 Sensory requirements

Sensory requirements shall comply with the requirements in Table 1.

Table 1 Sensory requirements

Project requires test methods Color status white Crystal or powder the sample is placed on a clean white paper, were visually Observed Musty aroma, flavor and fermentation coffee-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 2,3,5,6-tetramethyl-pyrazine content, w /% ≥ 98.0 Appendix A
Melting point/°C 85.0 ~ 90.0 GB/T 14457.3 Appendix A Determination of the content of

2,3,5,6-tetramethyl pyrazine A.1 instruments and equipment A.1.1 Chromatography. in GB/T 11538-2006 specified in Chapter 5.

A.1.2 Column. capillary column.

A.1.3 Detector. hydrogen flame ionization detector.

A.2 Determination

Area normalization method. Press the GB/T 11538-2006 Determination 10.4.

Sample Preparation. Weigh 1g of this product was dissolved in 10 mL of 95% (volume fraction) of ethanol, shake up.

A.3 repeatability and results are expressed 11538-2006 carried out in accordance with the provisions of 11.4 GB/T , should meet the requirements.

2,3,5,6-tetramethyl pyrazine food additive gas chromatogram and operating conditions see Appendix B.

Appendix B

Food additive 2,3,5,6-tetramethyl pyrazine GC operating conditions and FIG.

(Area normalization method) B.1 food additive 2,3,5,6-tetramethyl pyrazine GC FIG.

2,3,5,6-tetramethyl pyrazine food additive gas chromatography is shown in Figure B.1.

Description.

1 --- Ethanol (solvent);

2 --- 2,3,5,6-tetramethylpyrazine.

Figure B.1 food additive 2,3,5,6-tetramethyl pyrazine GC FIG.

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

B.2.2 stationary phase. polyethylene glycol 20000.

B.2.3 film thickness. 0.25 μ m.

B.2.4 chromatographic oven temperature. 140 °C thermostat 10min, then linear temperature programmed from 140 deg.] C to 200 °C, a rate of 10 °C/min, and finally 200 °C thermostat 10min.

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.

B.2.9 carrier gas flow rate. head pressure 60kPa.

B.2.10 Injection volume. about 2 μ L.

B.2.11 split ratio. 100.1.