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

GB 25593-2010

**National food safety standards of food additives --
N,2,3-trimethyl-2-isopropyl butanamide**

食品添加剂 N,2,3-三甲基-2-异丙基丁酰胺

(English Translation)

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Foreword

Appendix A of this standard is a normative appendix, Appendix B is an informative annex.

National Food Safety Standard Food additive N, 2,3- trimethyl-2-isopropyl butanamide

1 Scope

This standard applies to the isopropyl bromide and propionitrile for raw materials of food additives N, 2,3- trimethyl-2-isopropyl butanamide.

2 Normative references

The standard file referenced in the application of this standard is essential. For cited documents with dates, only the date of Version applies to this standard. For undated references, the latest edition (including any amendments) applies to this standard.

3.1 Chemical Name

N, 2,3- trimethyl-2-isopropyl butanamide

3.2 CAS number

51115-67-4

Formula 3.3

C₁₀H₂₁NO

3.4 Relative molecular mass

171.28 (according to 2007 international relative atomic mass)

3.5 Formula

uojo Z

4 Technical Requirements

4.1

Sensory requirements. comply with Table 1.

Table 1 Sensory requirements

Project requires test methods the white color sample placed on a clean white paper, were visually observed.

Organizational state of the crystalline solid Aroma, flavor like mint cool flavor GB/T 14454.2

4.2

Physical indicators. to comply with Table 2.

Table 2. Physical and chemical indicators

Item Index Test Method Melting point 60 °C ~ 63 °C GB/T 14457.3 Acid value (in dollars KOH)/(mg/g) ≤ 1 GB/T 14455.5 Content (GC, area normalization method) /% ≥ 99.0 Appendix A Heavy metal content (Pb)/(mg/kg) ≤ 10 GB/T 5009.74 Arsenic (As)/(mg/kg) ≤ 3 GB/T 5009.76 Appendix A (Normative) Determination of A.1 instruments and equipment A.1.1 chromatograph. According to GB/T 11538-2006 provisions in Chapter 5.

A.1.2 capillary column.

A.1.3 hydrogen flame ionization detector.

A.2 Determination

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

Sample Preparation. Weigh 1g of this product was dissolved in 2mL of anhydrous ethanol, shake spare.

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

Food additive N, 2,3- trimethyl-2-isopropyl butanamide typical gas chromatogram (area normalization method) See Appendix B.

Appendix B

(Informative)

Food additive N, 2,3- trimethyl-2-isopropyl butanamide typical gas chromatogram (Area normalization method) B.1 food additive N, 2,3- trimethyl-2-isopropyl butanamide Typical gas chromatograph - Figure B.1.

Figure B.1

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

B.2.2 stationary phase. polyethylene glycol.

B.2.3 film thickness. 0.25 μ m.

B.2.4 chromatography oven temperature. linear temperature program from 100 °C to 150 °C, the rate of 2.5 °C/min; and finally at 150 °C heated 10 min.

B.2.5 Inlet temperature. 220 °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. 1.2mL/min.

B.2.10 Injection volume. about 0.2 μ L.

B.2.11 split ratio. 1/80.

N, 2,3- trimethyl-2-isopropyl butanamide solvent. ethanol