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GB 29964-2013

Food additive -- Dimethyl sulfide

(English Translation)

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1 Scope

This standard applies to the methyl mercaptan or methyl chloride as raw materials obtained food additive dimethyl sulfide.

2.1 Chemical Name

Dimethyl disulfide

Formula 2.2

C2H6S2

2.4 Relative molecular mass

94.19 (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 Colorless to pale yellow color of the sample was placed inside color than the tube, were visually observed Liquid state Aroma of onion-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

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Item Index Test Method Dimethyl disulfide content, w /% >= 97.0 Appendix A Refractive index (20 °C) 1.522 ~ 1.527 GB/T 14454.4 the relative density (25 °C/25 °C) 1.058 ~ 1.065 GB/T 11540 Appendix A Determination of dimethyl disulfide 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 dimethyl disulfide gas chromatograph (area normalization method) See Appendix B.

Appendix B

Food additive dimethyl disulfide gas chromatogram (Area normalization method) B.1 food additive dimethyl sulfide gas chromatogram

Figure B.1.

Figure B.1 food additive dimethyl sulfide gas chromatogram

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

B.2.2 stationary phase. polyethylene glycol.

B.2.3 film thickness. 0.25 μm.

B.2.4 chromatography oven temperature. 80 °C constant temperature 10 min; then linear temperature programmed from 80 °C ~ 200 °C, the rate of 10 °C/min; final Heated 10 min at 200 °C.

B.2.5 inlet temperature. 230 °C.

B.2.6 detector temperature. 230 °C.

B.2.7 Detector. Hydrogen flame ionization detector.

B.2.8 carrier gas. nitrogen.

B.2.9 pre-column pressure. 60 kPa.

B.2.10 Injection volume. about 0.2 μL.

B.2.11 split ratio. 100?1.

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