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

GB 29965-2013

**Food additive -- Dipropyl disulfide
(English Translation)**

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1 Scope

This standard applies to the propanethiol for raw materials of food additives dipropyl sulfide.

2.1 Chemical Name

Dipropyl disulfide

Formula 2.2

C₆H₁₄S₂

2.4 Relative molecular mass

150.30 (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 with no lasting aroma, pungent garlic or onion sulfur-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 Dipropyl sulfide content, w /% ≥ 98.0 Appendix A Refractive index (20 °C) 1.495 ~ 1.500 GB/T 14454.4 the relative density (25 °C/25 °C) 0.950 ~ 0.960 GB/T 11540 Appendix A Determination of dipropyl sulfide 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 dipropyl sulfide gas chromatograph (area normalization method) See Appendix B.

Appendix B

Food additives dipropyl sulfide gas chromatogram (Area normalization method) B.1 food additive dipropyl sulfide gas chromatogram

Figure B.1.

Figure B.1 food additives dipropyl 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. 140 °C constant temperature 10 min; then linear temperature program from 140 °C ~ 200 °C, the rate of 10 °C/min; most After 200 °C heated 20 min.

B.2.5 Inlet temperature. 240 °C.

B.2.6 detector temperature. 240 °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.