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**NATIONAL STANDARD OF THE
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GB 28356-2012

**Food additive -- ethyl salicylate (Liu Ethyl)
(English Translation)**

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1 Scope

This standard applies to salicylic acid and ethanol as raw materials prepared by the food additives ethyl salicylate (ethyl sulfate).

2.1 Chemical name

2-hydroxybenzoate

2.2 Molecular formula

C₉H₁₀O₃

2.4 Relative molecular mass

166.18 (according to the 2007 International Relative Atomic Quality)

3 Technical requirements

3.1

sensory requirements. should be consistent with the provisions of Table 1.

Table 1 sensory requirements

The project requires a test method Color colorless to pale yellow State liquid Place the sample in a colorimetric tube with visual inspection Observation of law Aroma fragrance, fennel, Ivy aroma GB/T 14454.2

3.2

Physical and chemical indicators. should be consistent with the provisions of Table 2.

Table 2 Physical and chemical indicators

Item Index Test Method Ethyl salicylate content, w /% ≥ 98.0 Appendix A Acid value (in KOH)/(mg/g) ≤ 3.0 GB/T 14455.5 Refractive index (20 ° C) 1.518 ~ 1.525 GB/T 14454.4 Relative density (25 ° C/25 ° C) 1.125 ~ 1.131 GB/T 11540 Appendix A Determination of ethyl salicylate content A.1 Instruments and equipment A.1.1 chromatograph. according to GB/T 11538-2006 in Chapter 5 of the provisions.

A.1.2 Column. Capillary column.

A.1.3 Detector. Hydrogen flame ionization detector.

A.2 Determination method Area normalization method. according to GB/T 11538-2006 10.4 determination of content.

A.3 repeatability and result representation According to GB/T 11538-2006 11.4 implementation of the provisions.

Food additives Salicylic acid ethyl ester Typical gas chromatograms (area normalization)
See Appendix B.

Appendix B

Food additive - Salicylic acid ethyl ester Typical gas chromatogram (Area normalization method) B.1 Food Additive Salicylic Acid Ethyl Esters Typical Gas Chromatography A typical gas chromatogram of the food additive, salicylate, is shown in Figure B.1.

Figure B.1 Typical additives for food additives, salicylate

B.2 Operating conditions B.2.1 Column. capillary column, length 30m, inner diameter 0.32mm.

B.2.2 Stationary phase. (5% phenyl) methylpolysiloxane.

B.2.3 Film thickness. 0.25 μm .

B.2.4 Chromatography furnace temperature. 220 ° C constant temperature.

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. about 30 mL/min.

B.2.10 Injection volume. 0.2 μL .

B.2.11 Split ratio. 1/75.