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

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**Food additives -- Phenylethyl acetate
(English Translation)**

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 - 2.1 Chemical name
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1 Scope

This standard applies to acetic acid (or acetic anhydride) and phenylethyl alcohol as raw materials prepared by the food additives phenylethyl acetate.

2.1 Chemical name

2-phenylethyl acetate

2.2 Molecular formula

C₁₀H₁₂O₂

2.4 Relative molecular mass

164.2 (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 Colorless to pale yellow State liquid Place the sample in a colorimetric tube with visual inspection Observation of law Fragrant sweet, rose - fruity, honey - like 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 Solubility (25 ° C) 1mL The sample is fully dissolved in 2mL ~ 4mL 70% (volume fraction) ethanol GB/T 14455.3 Phenylethyl acetate content, w /% >= 98.0 Appendix A Acid value (in KOH)/(mg/g) <= 1.0 GB/T 14455.5 Refractive index (20 ° C) 1.496 ~ 1.502 GB/T 14454.4 Relative density (25 °C/25 °C) 1.030 ~ 1.034 GB/T 11540 Appendix A Determination of phenylethyl acetate 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 Phenylethyl acetate Typical gas chromatograms (area normalization) See Appendix B.

Appendix B

Food additives Phenylethyl acetate Typical gas chromatograms (Area normalization method) B.1 Food additive Phenylethyl acetate Typical gas chromatogram Food additives Phenylethyl acetate Typical gas chromatograms are shown in Figure B.1.

Figure B.1 Food additives Phenylethyl acetate Typical gas chromatograms

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 Chromatographic furnace temperature. 180 °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.