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**NATIONAL STANDARD OF THE
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**Food additives -- Butyl acetate
(English Translation)**

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1 Scope

This standard applies to acetic acid and butanol as raw materials prepared by the food additives butyl acetate.

2.1 Chemical name

Butyl acetate

2.2 Molecular formula

C₆H₁₂O₂

2.3 Structural formula

CH₃COO (CH₂)₃CH₃

2.4 Relative molecular mass

116.16 (according to 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 and colorless State liquid Place the sample in a colorimetric tube with visual inspection Observation of law A strong aroma of fragrance 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 Butyl acetate content, w /% ≥ 98.0 Appendix A Acid value (in KOH)/(mg/g) ≤ 2.0 GB/T 14455.5 Refractive index (20 ° C) 1.393 ~ 1.396 GB/T 14454.4 Relative density (25 ° C/25 ° C) 0.876 ~ 0.880 GB/T 11540 Appendix A Determination of butyl 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 Butyl Acetate Typical Gas Chromatography (Area Normalization) See Appendix B.

Appendix B

Food Additives Butyl Acetate Typical Gas Chromatography (Area normalization method) B.1

Food Additives Butyl Acetate Typical Gas Chromatography Food additives butyl acetate Typical gas chromatograms are shown in Figure B.1.

Figure B.1 Food additive butyl acetate Typical gas chromatogram

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. 120 °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.