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**NATIONAL STANDARD OF THE
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**Food additives -- Acetic acid decyl
(English Translation)**

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1 Scope

This standard applies to acetic acid and decyl alcohol as raw materials made of food additives decyl acetate.

2.1 Chemical name

Decyl acetate

2.2 Molecular formula

C₁₂H₂₄O₂

2.3 Structural formula

CH₃COO (CH₂)₉CH₃

2.4 Relative molecular mass

200.32 (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 colorless to pale yellow Tissue state liquid Place the sample in a colorimetric tube with visual inspection Observation of law Aroma pear fragrance, fruity, orange - rose 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) 1 mL The sample was completely dissolved in 2 mL of 80% by volume ethanol. GB/T 14455.3 Decyl acetate content, w /% ≥ 98.0

Appendix A Acid value (in KOH)/(mg/g) ≤ 1.0 GB/T 14455.5 Refractive index (20 ° C)

1.424 ~ 1.430 GB/T 14454.4 Relative density (25 °C/25 °C) 0.861 ~ 0.866 GB/T 11540

Appendix A Determination of decyl 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 Decylated acetate Typical gas chromatograms (area normalization) See Appendix B.

Appendix B

Food Additives Acetyl decanoate Typical Gas Chromatography (Area normalization method)

B.1 Food Additive Glycol decylate Typical Gas Chromatography A typical gas chromatogram of decanyl acetate for food additives is shown in Figure B.1.

Figure B.1 Typical additive for decanate acetate food additive

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 μ L.

B.2.11 Split ratio. 1/75.