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ICS 67.220.20
CCS C 54;X40

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 28327-2012

Food additives -- Octyl acetate

(English Translation)

Issued on: January 1, 1970 **Implemented on: January 1, 1970**

Issued by: Ministry of Health of the People's Republic of China

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1 Scope

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

2.1 Chemical name

Octyl acetate

2.2 Molecular formula

C10H20O2

2.3 Structural formula

CH3COO (CH2) 7CH3

2.4 Relative molecular mass

172.27 (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 and colorless Tissue state liquid Place the sample in a colorimetric tube with visual inspection Observation of law Aroma fruity, orange - like, jasmine - like aroma GB/T 14454.2

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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 is fully dissolved in 4 mL of 70% by volume ethanol. GB/T 14455.3 Octyl acetate content, w /% >= 98.0 Appendix A Acid value (in KOH)/(mg/g) <= 1.0 GB/T 14455.5 Refractive index (20 ° C) 1.418 ~ 1.421 GB/T 14454.4 Relative density (25 °C/25 °C) 0.865 ~ 0.868 GB/T 11540 Appendix A Determination of octyl 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 Octyl Acetate Typical Gas Chromatography (Area Normalization) See Appendix B.

Appendix B

Food Additives Octyl Acetate Typical Gas Chromatography (Area normalization method) B.1 Food Additives Octyl Acetate Typical Gas Chromatography Food additives Octyl acetate Typical gas chromatograms are shown in Figure B.1.

Figure B.1 Food additives Octyl 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.

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B.2.10 Injection volume. 0.2 μL.

B.2.11 Split ratio. 1/75.

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