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

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 - 2.1 Chemical name
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1 Scope

This standard applies to benzaldehyde or cinnamon oil as raw materials prepared by the food additives cinnamaldehyde.

2.1 Chemical name

3-phenyl-2-propenal

2.2 Molecular formula

C₉H₈O

2.4 Relative molecular mass

132.16 (according to the 2007 international relative atomic mass)

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 Colorful yellow to yellow State liquid Place the sample in a colorimetric tube with visual inspection Observation of law A strong aroma of cinnamon 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 Cinnamaldehyde content, w /% ≥ 98.0 Appendix A Acid value (in KOH)/(mg/g) ≤ 10.0 GB/T 14455.5 Refractive index (20 ° C) 1.619 ~ 1.625 GB/T 14454.4 Relative density (25 ° C/25 ° C) 1.046 ~ 1.053 GB/T 11540 Appendix A Determination of Cinnamaldehyde 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 Cinnamaldehyde Typical gas chromatograms (area normalization) See Appendix B.

Appendix B

Food Additives Cinnamaldehyde Typical Gas Chromatography (Area normalization method)

B.1 Food additive Cinnamaldehyde Typical gas chromatogram Food additives

Cinnamaldehyde Typical gas chromatograms are shown in Figure B.1.

Figure B.1 Food additive Cinnamaldehyde 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 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.