

ICS 67.220.20
CCS C 54;X40



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

GB 28354-2012

**National food safety standards -- Food additives --
Anisaldehyde
(English Translation)**

Issued on: January 1, 1970

Implemented on: January 1, 1970

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

Table of Contents

- 1 Scope
- 2 Chemical name, molecular formula, structural formula and relative molecular mass
 - 2.1 Chemical name
 - 2.2 Molecular formula
 - 2.3 Structural formula
 - 2.4 Relative molecular mass
- 3 Technical requirements

1 Scope

This standard applies to p-hydroxybenzaldehyde or anethole as raw material for the preparation of food additives anisic aldehyde.

2.2 Molecular formula

C₈H₈O₂

2.4 Relative molecular mass

136.15 (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 a visual method Observed Aroma strong sweet, fragrant 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 Anisaldehyde content, w /% ≥ 97.0 Appendix A Acid value (in KOH)/(mg/g) ≤ 6.0 GB/T 14455.5 Refractive index (20 ° C) 1.568 ~ 1.574 GB/T 14454.4 Relative density (25 ° C/25 ° C) 1.115 ~ 1.123 GB/T 11540 Appendix A Determination of

anisaldehyde 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 additive anisic aldehyde Typical gas chromatogram (area normalization method) See Appendix B.

Appendix B

Food Additives Fennel Aldehyde Typical Gas Chromatography (Area normalization method)

B.1 Food Additives Anisic Aldehyde Typical Gas Chromatography A typical aerosol chromatogram of anisic aldehyde for food additives is shown in Figure B.1.

Figure B.1 Typical additive analysis of anisic aldehyde for food additives

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..200 °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.