



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

GB 5009.233-2016

Method for analysis of hygienic standard of vinegar

食品安全国家标准

(English Translation)

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Foreword

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1 Scope

This Standard specifies the method for determination of free mineral acid in vinegar.

This Standard applies to the determination of free mineral acid in vinegar

2 Principle

When there is free mineral acid (such as sulfuric acid, nitric acid, hydrochloric acid), the concentration of hydrogen ions increases, and the color of the indicator can be changed.

3 Reagents and materials

Unless otherwise specified, all the reagents in this method are analytical reagents, the water is grade-1 water that is specified by GB/T 6682.

3.1 Reagents

3.1.1

Thymol blue.

3.1.2

Methyl violet (C 25H 30N 3Cl).

3.1.3

Sodium hydroxide (NaOH).

3.1.4

Ethanol (CH₃CH₂OH).

3.2 Preparation of reagents

3.2.1

Sodium hydroxide solution (4 g/L)

Take 2 g of sodium hydroxide to dissolve in water; add water to 500 mL.

3.2.2

Thymol blue test paper

Take 0.10 g of thymol blue to dissolve in 50 mL of ethanol;

add 6 mL of sodium hydroxide solution (4 g/L); add water to 100 mL. Use the solution to soak the filter paper; then dry it, and store for later use.

3.2.3

Methyl violet test paper

Weigh 0.10 g of methyl violet to dissolve in 100 mL of water; immerse the filter paper in this solution; take it out and dry it; store for later use.