

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

SN/T 0859-2016

Replacing SN/T 0859-2000

**Determination of dehydroacetic acid in condiments for
export--Ultraviolet spectrophotometric method**

出口调味料中脱氢乙酸的测定 紫外分光光度法

(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces SN/T 0859-2000 "Determination of Dehydroacetic Acid in Import and Export Soy Sauce". This standard and SN/T 0859-Compared with 2000, the main technical changes except editorial changes are as follows.

--- The scope of application is based on the original standard (soy sauce), adding vinegar, oyster sauce, barbecue sauce, sauce;

--- Increased the limit of quantitative detection (LOQ).

This standard is proposed and managed by the National Certification and Accreditation Administration.

This standard was drafted. Shanghai Entry-Exit Inspection and Quarantine Bureau of the People's Republic of China, Guangdong Entry-Exit Inspection and Inspection Epidemic situation.

1 Scope

This standard specifies the method for determining the content of dehydroacetic acid in export seasonings by ultraviolet spectrophotometry.

This standard is applicable to the determination of dehydroacetic acid content in export soy sauce (soy sauce soy sauce, soy sauce soy sauce), vinegar, oyster sauce, barbecue sauce and sauce.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6682 Analytical laboratory water specifications and test methods

3.1 Principle of the method

The dehydroacetic acid in the sample is subjected to steam distillation and organic solvent extraction under acidic conditions, and then irradiated with ultraviolet spectrophotometer at 308 nm.

The absorbance was measured in the strength and compared with the standard.

3.2 Reagents and materials

Unless otherwise specified, the reagents used in this method are of analytical grade. The water is the third grade water specified in GB/T 6682.

3.2.1 15% (mass concentration) tartaric acid solution. Weigh 15g of tartaric acid, add water to dissolve to 100mL.

3.2.2

Sodium chloride.

3.2.3

Silicone resin. liquid, industrial grade, used for defoaming.

3.2.4

Hydrochloric acid ($\rho=1.19\text{g/mL}$).

3.2.5

Hydrochloric acid solution (19, volume ratio). 10 mL of hydrochloric acid was slowly added to 90 mL of water.

3.2.6

Ether.

3.2.7

Sodium bicarbonate.

3.2.8 1% (mass concentration) sodium bicarbonate solution. 1 g of sodium hydrogencarbonate was weighed and dissolved in water to a volume of 100 mL.

3.2.9 2mol/L sodium chloride solution. Weigh 11.7g of sodium chloride and dissolve it to 100mL with water.

3.2.10 2mol/L hydrochloric acid solution. Take 16.7mL hydrochloric acid and add water to

100mL.

3.2.11

Hydrochloric acid-sodium chloride solution. Pipette 2mol/L sodium chloride solution (3.2.9) 50mL and 2mol/L hydrochloric acid solution (3.2.10) 1 mL, after mixing, diluted to 200 mL with water.

3.2.12

anhydrous sodium sulfate.

3.2.13

sodium hydroxide.

3.2.14 0.1mol/L sodium hydroxide solution. Weigh 4g of sodium hydroxide, dissolved in water to a volume of 1L.

3.2.15

Dehydroacetic acid standard solution. accurately weigh 0.1000g dehydroacetic acid standard in 6mL (0.1mol/L) sodium hydroxide solution (3.2.14), dilute to 100 mL with water, ie a standard stock solution with a concentration of 1 mg/mL. Dilute to 20µg/mL with water when using Hydrogen acetic acid standard working fluid.