

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

**SN/T 4675.29-2016**

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**Determination of *Brettanomyces bruxellensis* in wine for  
export--Real-time PCR method  
(English Translation)**

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## Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 Biosecurity measures and pollution prevention measures

4.1 Biosecurity measures

4.2 Anti-pollution measures

5 Instruments and equipment

### Foreword

SN/T 4675 "Methods for Quality and Safety of Exported Wines" is divided into 30 parts.

---SN/T 4675.1. Determination of glycerol in wines;

---SN/T 4675.2. Determination of 2,3-butanediol in exported wines by gas chromatography;

---SN/T 4675.3. Determination of stable carbon isotope ratio of ethanol in exported wines;

---SN/T 4675.4. Determination of lactic acid in exported wines;

--- SN/T 4675.5. Determination of organic acids in exported wines by ion chromatography;

---SN/T 4675.6. Determination of glucose, fructose and sucrose in exported wines;

---SN/T 4675.7. Determination of acetaldehyde in exported wines by gas chromatography-mass spectrometry;

---SN/T 4675.8. Determination of 5-hydroxymethylfurfural in exported wines by liquid chromatography;

---SN/T 4675.9. Determination of diethylene glycol in exported wines by gas chromatography-mass spectrometry;

---SN/T 4675.10. Determination of ochratoxin A in exported wines by liquid chromatography-mass spectrometry/mass spectrometry;

---SN/T 4675.11. Determination of seven anthocyanins in exported wines by ultra performance liquid chromatography;

---SN/T 4675.12. Determination of lysozyme in exported wines by liquid chromatography;

--- SN/T 4675.13. Determination of 2,4,6-trichloroanisole residues in exported wines by gas

chromatography-mass spectrometry;

---SN/T 4675.14. Determination of natamycin in exported wines by liquid chromatography-mass spectrometry/mass spectrometry;

---SN/T 4675.15. Determination of salicylic acid, dehydroacetic acid and p-chlorobenzoic acid in exported wines by liquid chromatography;

---SN/T 4675.16. Determination of fumaric acid in exported wines by liquid chromatography-mass spectrometry/mass spectrometry;

--- SN/T 4675.17. Determination of butyl tin content in exported wines by gas chromatography - mass spectrometry/mass spectrometry;

--- SN/T 4675.18. Determination of residual amount of dithiocarbamate in exported wines.

---SN/T 4675.19. Determination of sodium, magnesium, potassium, calcium, chromium, manganese, iron, copper, zinc, arsenic, selenium, silver, cadmium and lead in exported wine;

---SN/T 4675.20. Determination of rare earth elements in exported wines by inductively coupled plasma mass spectrometry;

--- SN/T 4675.21. Determination of soluble inorganic salts in exported wines by ion chromatography;

---SN/T 4675.22. Determination of total sulfur dioxide in exported wine colorimetric method;

---SN/T 4675.23. Determination of ammonia nitrogen in exported wine and grape juice by continuous flow analyzer method;

---SN/T 4675.24. Determination of the export wine Fulin-Shoka index spectrophotometer method;

---SN/T 4675.25. Determination of color of exported wines CIE1976 ( $L^*a^*b^*$ ) color space method;

---SN/T 4675.26. Determination of turbidity of exported wines by scattered light method;

---SN/T 4675.27. Determination of alkaline ash in exported wines;

---SN/T 4675.28. Counting bacteria, mold and yeast for exporting wine;

---SN/T 4675.29. Real-time fluorescent PCR method for wine yeast test in exported wine;

---SN/T 4675.30. Real-time fluorescent PCR method for the detection of Bayesian yeast in exported wine.

This part is the 29th part of SN/T 4675.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

## 1 Scope

This part of SN/T 4675 specifies the qualitative detection method for the wine yeast (*Brettanomyces bruxellensis*).

This section applies to the detection of wine yeast in various wines.

## 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 GB 19489 General requirements for laboratory biosafety GB/T 27403 Laboratory Quality Control Specification for Food Molecular Biology Testing

## 3 Terms and definitions

The following terms and definitions apply to this document.

*Brassica cerevisiae Brettanomycesbruxellensis* Yeast is a yeast that can survive in wine and can produce phenols such as 4-ethylphenol and 4-ethyl-2-methoxyphenol.

A compound that causes the wine to emit a taste similar to horse sweat. If the concentration is too high, it will seriously affect the quality of the wine.

### 4.1 Biosecurity measures

In order to protect the safety of laboratory personnel, it should be tested by qualified staff. All cultures and waste should be referred to.

The relevant provisions of GB 19489 are implemented.

### 4.2 Anti-pollution measures

Pollution prevention measures shall comply with the provisions of GB/T 27403.

## 5 Instruments and equipment

### 5.1

Water bath or heating template.  $95\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ .

**5.2**

High-speed refrigerated centrifuge. The highest centrifugal force is not less than 12000g.

**5.3**

Centrifuge tube. 50mL, 2mL.

**5.4**

Pipette. range 0.5 $\mu$ L~10 $\mu$ L; range 10 $\mu$ L~100 $\mu$ L; range 100 $\mu$ L~1000 $\mu$ L and sterile tip.