

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

SN/T 4675.25-2016

**Determination of chromatic characteristics of wine for export
based on CIELAB color space system**

出口葡萄酒颜色的测定 CIE 1976(Lab)色空间法

(English Translation)

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Foreword

SN/T 4675 "quality of export wine quality and safety analysis" is divided into 30 parts.

- SN/T 4675.1 Determination of export glycerol in the enzyme method;
- SN/T 4675.2 Export wine 2,3-butanediol Determination of gas chromatography;
- Determination of stable carbon isotope ratio of ethanol in exported wine by SN/T 4675.3;
- SN/T 4675.4 Determination of lactic acid in export wine enzymatic;
- SN/T 4675.5 wine exports - Determination of organic acids by ion chromatography;
- SN/T 4675.6 Determination of glucose, fructose and sucrose in export wines;
- SN/T 4675.7 Determination of acetaldehyde in wine exports - Gas Chromatography - Mass Spectrometry;
- SN/T 4675.8 Export wine 5-hydroxymethyl furfural Determination of liquid chromatography;
- SN/T 4675.9 Exported wine - Determination of diethylene glycol - Gas Chromatography - Mass Spectrometry;
- SN/T 4675.10 Determination of ochratoxin A in export wines - Liquid chromatography - mass spectrometry/mass spectrometry;
- SN/T 4675.11 Determination of 7 kinds of anthocyanins in exported wine by ultra performance liquid chromatography;
- SN/T 4675.12 export wine lysozyme Determination of liquid chromatography;
- SN/T 4675.13 Determination of 2,4,6 - trichloromethyl ether residues in wine exports Determination of liquid chromatography - mass spectrometry/mass spectrometry;
- SN/T 4675.14 Determination of natamycin in wine exports by liquid chromatography - mass spectrometry/mass spectrometry;
- SN/T 4675.15 exported wine salicylic acid, dehydroacetic acid and p-chlorobenzoic acid

Determination of liquid chromatography;

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

--- SN/T 4675.17 Determination of butyl tin content in exported wine - Gas Chromatography - Mass Spectrometry/Mass Spectrometry;

--- SN/T 4675.18 Determination of dithiocarbamate residues in export wines; headspace gas chromatography;

Determination of sodium, magnesium, potassium, calcium, chromium, manganese, iron, copper, zinc, arsenic, selenium, silver, cadmium and lead in exported wines;

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

--- SN/T 4675.21 Determination of soluble inorganic salts exported wine Ion chromatography;

--- SN/T 4675.22 Determination of total sulfur dioxide in wine exports colorimetry;

--- SN/T 4675.23 Determination of ammonia nitrogen in wine and grape juice exports continuous flow analyzer;

--- SN/T 4675.24 Export wine Fulin - Schock Index Determination spectrophotometer;

--- SN/T 4675.25 Determination of color of export wine CIE1976 (L * a * b *) color space method;

--- SN/T 4675.26 Determination of turbidity of exported wine - Scattered light method;

--- SN/T 4675.27 Determination of export wine alkaline ash;

--- SN/T 4675.28 exports of wine bacteria, mold and yeast count;

--- SN/T 4675.29 Export wine wine yeast test real-time fluorescent PCR;

--- SN/T 4675.30 Exported wine Bayer engaged yeast test real-time PCR method.

This section is part 25 of SN/T 4675.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This part of the revision using the International Organization of grapes and wine (OIV) method OIV-MA-AS2-11 II color detection CIELab. This section is consistent with the method in technical content, but taking into account the characteristics of our own standards and Chinese expression habits, OIV the method of OIV-MA-AS2-11II made editorial changes and validation of individual content. The main content of the amendment is.

- Increased definition;
- Increasing the CIE1976 ($L^* a^* b^*$) color space parameters of the formula;
- Added CIE1976 ($L^* a^* b^*$) color space color difference formula;
- Increased CIE lighting body in CIE1964 standard chromaticity observer tristimulus value;
- Added CIE1964 standard chroma viewer (color matching function);
- Increased CIE standard light source relative spectral power distribution;
- Increasing the different optical path cuvette chrominance value parameter representation.

Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This part of the national certification and accreditation supervision and management committee proposed and centralized.

This part of the drafting unit. People's Republic of China Qinhuangdao Exit Inspection and Quarantine, People's Republic of China Exit Inspection and Quarantine Bureau, Guangdong Entry-Exit Inspection and Quarantine of the People's Republic of China, Jinan Haineng Instrument Co., Ltd.

1 Scope

This part of SN/T 4675 specifies the method of determination of CIE 1976 ($L^* a^* b^*$) color space for wine color measurement.

This section applies to the detection of wine color.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 3978 standard lighting body and geometric conditions GB/T 3979 object color measurement methods GB/T 6682 analytical laboratory water specifications and test methods

3 Terms and definitions

The following terms and definitions apply to this document.

Color space Represents the color of the three-dimensional space.

Uniform color space the same distance can be expressed in the same color space of perceived color.

CIE1976 ($L^* a^* b^*$) color space (CIELABcolorspace)

1976 CIE recommended uniform color space. This space is a three-dimensional Cartesian coordinate system.

Color difference Quantitative representation of perceived difference in color. Expressed by ΔE .

Lightness

Visual perception characteristics representing the degree of brightness of the surface of an object are given an index based on absolute white and absolute black. Three colors One of the attributes.

Saturation curoma

With the distance and other light-colored brightness of the perceived characteristics to represent the color of the surface of the shades, and give indexing. One of the three attributes of color.