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

GB 18186-2000

**[GB/T 18186-2000] Fermented soy sauce [including
MODIFICATIONS 1&2]
(English Translation)**

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Foreword

Chapter 8 and Article 5.3.2 of this Standard are mandatory; the remaining is recommended.

This Standard was formulated based on ZB X66 012-1987 "Quality Standard for Soy Sauce with High-Salt-Diluted State Fermentation", ZB X66 013-1987 "Soy Sauce with Low-Salt and Solid State Fermentation" and ZB X66 014-1987 "Testing Method for Soy Sauce with Low-Salt and Solid State Fermentation".

Hygienic index of this Standard is consistent with that of GB 2717-1996 "Hygienic Standard for Soy Sauce".

This Standard was proposed by State Bureau of Internal Trade.

Drafting organization of this Standard. Shijiazhuang Zhenji Brewing Group Co., Ltd.

Main drafters of this Standard. Zhang Lin, Lu Zhaoyuan, Li Shuanqin and Li Yue.

China Condiment Industry Association was entrusted to interpret this Standard.

Fermented Soy Sauce

1 Scope

This Standard specified the definitions, product classifications, technical requirements, test methods, inspection rules and labeling, packaging, transportation and storage requirements for the fermented soy sauce.

This Standard applies to the fermented soy sauce given in Chapter 3.

2 Normative References

The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. At the time of publication, the editions indicated are valid. All standards are subject to revision. The parties who are using this Standard shall explore the possibility of using the latest version of the following standards.

GB/T 601-1998 Chemical Reagent - Preparations of Standard Volumetric Solutions

GB 2715-1981 Hygienic Standard for Grains

GB 2717-1996 Hygienic Standard for Soy Sauce

GB 2760-1996 Hygienic Standard for Uses of Food Additives

GB 4789.22-1994 Microbiological Examination of Food Hygiene - Examination of Flavourings

GB/T 5009.39-1996 Method for Analysis of Hygienic Standard of Soybean Sauce

GB 5461-2000 Edible Salt

GB 5749-1985 Sanitary Standard for Drinking Water

GB/T 6682-1992 Water for Laboratory Use; Specifications

GB 7718-1994 General Standard for the Labeling of Foods

3 Definitions

This Standard applies the following definitions.

Fermented soy sauce

It refers to a liquid condiment with special color, fragrance and taste, made through

microbial fermentation, taking soybean and/or defatted soybean, wheat and/or bran as raw materials.

4 Product Classifications

It can be organized into two categories according to fermentation process.

4.1 Soy sauce with high-salt-diluted state fermentation (including solid-and-liquid fermented soy sauce)

It is a fermented product taking soybean and/or defatted soybean, wheat and/or bran as raw materials, through steaming and boiling and aspergillus starter propagation, mixing with saline solution to become diluted thin fermented material.

4.2 Soy sauce with low-salt and solid state fermentation

It is a fermented product taking defatted soybean and bran as raw materials, through steaming and boiling and aspergillus starter propagation, mixing with saline solution to become solid soy sauce mash.

5.1.1 Soybean, defatted soybean, wheat, defatted soybean and bran. shall comply with

the rules of GB 2715.

5.1.4 Food additives. shall choose the food additives approved by GB 2760, which

shall meet relevant food additive standards.

5.2 Sensory characteristics

Sensory characteristics shall meet the requirements of Table 1.

Where.

X1 - Contents of sodium chloride in the sample, g/100 mL;

V - Volume that titrated sample diluted solution consuming 0.1 mol/L silver nitrate standard titration solution, mL;

V0 - Volume that blank test consuming 0.1 mol/L silver nitrate standard titration solution, mL;

c1 - Concentration of silver nitrate standard titration solution, mol/L;

**0.0585 - Mass that 1.00 mL silver nitrate standard titration solution
[c(AgNO₃)=1.000 mol/L]**

is equivalent to sodium chloride, g.

6.2.2.5 Allowed difference

Parallel test difference of the same sample shall be no more than 0.10 g/100 mL.

6.3.1 Instruments

- a) Kjeldahl flask, 500 mL;
- b) Condenser;
- c) Electrothermal constant-temperature dry box;
- d) Nitrogen ball;
- e) Analytical balance. sensibility of 0.1 mg;
- f) Acid burette. 25 mL;
- g) Pipette.

6.3.2 Test solution

- a) Mixed indicating liquid. prepared by mixing one portion of 0.2% methyl red ethanol solution and five portions of 0.2% bromocresol green ethanol solution;
- b) Mixed test solution. prepared by mixing 3 copper sulfate and 50 potassium sulphate;
- c) Sulfuric acid. 95% - 98%;
- d) 2% boric acid solution. WEIGH 2 g of boracic acid, DILUTE with water and scale to 100 mL;
- e) Zinc granule;
- f) 40% sodium hydroxide solution. WEIGH 40 g of sodium hydroxide, DILUTE with water and scale to 60 mL;
- g) 0.1 mol/L hydrochloric acid standard titration solution. formulated and standardized according to the rules of GB/T 601.