

ICS 67.220.20
CCS X 42



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

GB 1887-2007

**Food additive -- Sodium bicarbonate
(English Translation)**

Issued on: October 29, 2007

Implemented on: June 1, 2008

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

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Foreword

Clause 5 and Clause 8 in this standard are mandatory; and the rest are recommended.

The consistent degree between this standard and the standard Sodium Bicarbonate (2002) of Codex Alimentarius Commission is non-equivalent.

This standard replaces GB1887-1998 Food Additive - Sodium Bicarbonate.

Compared with GB1887-1998, the main changes of this standard are as follows.

- Adjust the indicator parameters correspondingly (3.2 of Edition 1998; Clause 5 of this standard);
- Add the indicator and test method of content and whiteness of chloride (Clause 5 of this standard);
- Improve the determination method of dry loss (4.3 of Edition 1998; 6.5 of this edition);
- Improve the determination method of pH value (4.4 of Edition 1998; 6.6 of this standard);
- Improve the determination method of content of heavy metal (4.6 of Edition 1998; 6.8 of this standard);
- Improve the package and storage (Clause 6 of Edition 1998, Clause 9 of this standard).

This standard was proposed by China Petroleum and Chemical Industry Association.

This standard shall be under the jurisdiction of Inorganic Chemicals Branch of National Standardization Technical Committee (SAC/TC 63/SC 1) and National Food Additives Standard Technical Committee (SAC/TC 11).

Drafting organizations of this standard. Tianjin Research & Design Institute of chemical industry, Tianjin Alkali Factory, Inner Mongolia Yuanxing Natural Alkali Co., Ltd., Xilinguole Sunite Alkali Co., Ltd., Soda Plant of Shandong Haihua Group, Lianyungang Alkali Factory of Nanjing Chemical Industry Co., Ltd. of Sinopec Group, Zigong Honghe Chemical Co., Ltd., Jiangsu Debang Xinghua Chemical Co., Ltd., Qingdao Alkali Co., Ltd., Hengyang Yuhua Chemical Industry Co., Ltd., Hengyang Hailian Bittern Chemical Co., Ltd., Guangzhou Nanxian Chemical Co., Ltd., and Alkali Lake Test Station of Inner Mongolia Yuanxing Natural Alkali Co., Ltd.

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The previous versions replaced by this standard are as follows.

Food Additive Sodium - Bicarbonate

1 Scope

This standard specifies the requirements, test method, inspection rules, sign, label, package, transportation and storage of food additive sodium bicarbonate.

This standard is applicable to the food additive sodium bicarbonate. This product can be used as the leavening agent or processing aids for food industry.

2 Normative references

The articles contained in the following documents have become part of this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this standard. For the undated documents so quoted, the latest editions shall be applicable to this standard.

GB/T 191-2000 Packaging - Pictorial marking for handling of goods (eqv ISO 780. 1997)

GB/T 3051-2000 Inorganic chemical products for industrial use - General method for determination of chloride content - Mercurimetric method

GB/T 5009.74-2003 Method for limit test of heavy metals in food additives

GB/T 5009.76-2003 Determination of arsenic in food additives

GB/T 6678 General principles for sampling chemical products

GB/T 6682-1992 Water for laboratory use - Specifications

GB/T 9724 Chemical reagent - General rule for the determination of pH

HG/T 3696.1 Inorganic chemical products - Preparations of standard volumetric solutions for chemical analysis

HG/T 3696.2 Inorganic chemical products - Preparations of standard solutions for chemical analysis

HG/T 3696.3 Inorganic chemical products - Preparations of reagent solutions for chemical analysis

m₁ - Value of mass of weighing bottle and specimen before drying, and the unit is g;

m₂ - Value of mass of weighing bottle and specimen after drying, and the unit is g;

m - Value of mass of specimen, and the unit is g.

Take the arithmetic mean value of parallel determination results as the determination result. The absolute difference of two parallel determination results shall not be more than 0.02%.

6.6.1 Instrument

PH meter. the accuracy is 0.02 pH unit.

6.6.2 Analysis steps

Weight 1.00 g ± 0.01 g of specimen; put it in a 250 mL beaker. Add about 100 mL of water without carbon dioxide to dissolve the specimen. Determine within 10 min according to the regulations of GB/T 9724 (since the time when adding the water).

6.7.1 Method summary

It is same as Clause 8 of GB/T 5009.76-2003.

6.7.2.2 Arsenic standard solution. 1 mL of this solution contains 1 μ g of arsenic.

Weigh 1.00 mL of arsenic standard solution according to the requirements of HG/T 3696.2; put it in a 100 mL bottle; use water to dilute to the mark; and shake it uniformly. Prepare this solution before using it.

6.7.3 Instruments and equipment

It is same as Clause 10 of GB/T 5009.76-2003.

6.7.4 Analysis steps

Weigh 1.00 g $\pm$ 0.01 g of specimen; put it in a 100 mL beaker. Add 10 mL of hydrochloric acid solution to dissolve the specimen.

Use pipette to weigh 1 mL of arsenic standard solution as the standard comparison solution. Determine according to the regulations of Clause 11 of GB/T 5009.76-2003.

6.11.2.2.1 95% (volume fraction) ethanol solution;

6.11.2.2.4 Chloride standard solution. 1 mL of this solution contains 0.01 mg of chloride.

Take 10.00 mL of chloride standard solution according to the requirements of HG/T 3696.2; put it in a 100 mL bottle; use the water to dilute to the mark; and shake it uniformly.

6.11.2.3 Analysis step

Weigh 1.00 g $\pm$ 0.01 g of specimen; put it in a 50 mL beaker; add the appropriate water to dissolve; transfer all to a 100 mL volumetric bottle; use water to dilute to the mark; shake it uniformly. Use pipette to take 25 mL of above test solution; put it in a 50 mL colorimetric tube; add 1 mL of ethanol solution with the volume fraction of 95%, 3 mL of nitric acid solution, and 2 mL of silver nitrate solution; use water to dilute to the mark; shake it slightly. After placing it for 10 min, compare the standard turbidity solution against black background. The generated turbidity must not be deeper than the standard turbidity solution.