



GB 5009.42-2016

National Food Safety Standard Determination of Table Salt Index

食品安全国家标准
食盐指标的测定

National Health and Family Planning
Commission of the People's Republic of China

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National Standard of the People's Republic of China

GB 5009.42-2016

National Food Safety Standard Determination of Table Salt Index 食品安全国家标准 食盐指标的测定

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Foreword

This Standard replaces GB/T 5009.42-2003 Method for Analysis of Hygienic Standard of Table Salt

Compared with GB/T 5009.42-2003, the main changes of this Standard are as follows:

- the standard name has been modified to National Food Safety Standard - Determination of Table Salt Index;
- the analytical methods for sensory examination, water insoluble substances, fluorine, zinc, copper, nitrite, etc. have been deleted;
- the analytical methods for sodium chloride, chloride ions, magnesium, sulfate radical, lead, barium and iodine have been modified;
- the analytical methods for calcium and potassium chloride have been added;
- the analytical methods for total arsenic, cadmium and total mercury in table salt have been specified.

National Food Safety Standard

Determination of Table Salt Index

1 Scope

This Standard specifies the test methods of sodium chloride, lead, total arsenic, cadmium, total mercury, barium, potassium chloride, potassium ferrocyanide and iodine in table salt.

This standard is applicable to the determination of indicators of table salt.

2 Determination of Sodium Chloride

2.1 Determination of moisture

Perform according to the direct drying method in GB 5009.3. Set the drying temperature to $140\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$. It is regarded as constant mass if two consecutive weighings do not differ by more than 5mg.

2.2 Determination of chloride ions

2.2.1 Principle

After the sample is dissolved, titrate with silver nitrate standard volumetric solution by using potassium chromate as indicator to determine chloride ions content.

2.2.2 Reagents and materials

Unless otherwise specified, all reagents used in this method refer to analytically pure reagents, and the water refers to Grade 3 water specified in GB/T 6682.

2.2.2.1 Reagents

2.2.2.1.1 Silver nitrate

2.2.2.1.2 Potassium chromate.

2.2.2.2 Preparation of reagents

2.2.2.2.1 Silver nitrate standard volumetric solution (0.1 mol/L).

2.2.2.2.2 Potassium chromate indicator: weigh 10 g of potassium chromate and dissolve it in 100 mL of water, dropwise add silver nitrate solution under stirring until reddish brown precipitate appears, and filter.

2.2.3 Instrument and equipment

2.2.3.1 Balance: with sensitivity of 0.1 mg.