



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

GB 1886.248-2016

Replacing GB 25580-2010

**National Food Safety Standard -- Food Additives -- Stabilized
Chlorine Dioxide**

食品安全国家标准 食品添加剂 稳定态二氧化氯

(English Translation)

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Foreword

This standard replaces GB 25580-2010 "national food safety standards for food additives stable chlorine dioxide solution." this standard compared with GB 25580-2010, the main changes are as follows.

- Standard name was changed to "national food safety standards for food additives stable chlorine dioxide";
- Modify the chlorine dioxide content index requirements and test methods;
- Modify the pH indicator;
- Remove the methanol index.

National Food Safety Standard Stable chlorine dioxide food additives

1 Scope

This standard applies to food additives carbonate absorbed by the chlorine dioxide system was stable chlorine dioxide food additives. this product Use of food additives should be used hydrochloric acid activation.

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Colorless or light yellow color State transparent liquid without suspension Take appropriate 50mL sample is placed in a beaker, observe the color in natural light and state

2.2 Physical indicators

Physical and chemical indicators should be consistent with the provisions of Table 2.

Table 2. Physical and chemical indicators

Item Index Test Method Chlorine dioxide (ClO₂)/(mg/L) ≥ 12000 GB 26366-2010 Appendix A Density, $\rho_{20}/(\text{g}/\text{cm}^3)$ 1.020 ~ 1.060 in Appendix A A.4 pH 8.5 ~ 10.5 Appendix A A.5 Arsenic (As)/(mg/L) ≤ 1.0 A.6 in Appendix A Heavy metals (Pb)/(mg/L) ≤ 5 Appendix A A.7 Appendix A Testing method A.1 Warning Reagents The test methods used in corrosive, the operation should take appropriate safety and health practices.

A.2 General Provisions this standard reagents and water, did not indicate when the other requirements, refer to the three water analytical reagent and GB/T 6682 stipulated.

Used in the test standard titration solution, impurities measured by standard solution, preparations and products, did not indicate when the other requirements, according to GB/T 601, GB/T 602, the provisions of the preparation of GB/T 603's. The solution in a solvent which does not indicate by when formulated, refers to an aqueous solution.

A.3 Identification Test A.3.1 Reagents and materials A.3.1.1 hydrochloric acid.

A.3.1.2 hydrochloric acid solution. 12.

A.3.1.3 calcium chloride solution. 100g/L.

A.3.2 Identification method A.3.2.1 Identification of carbonate Was added a solution of calcium chloride in the sample, to produce a white precipitate. The precipitate was dissolved in hydrochloric acid.

A.3.2.2 Identification chlorine dioxide Yellow gas can produce hydrochloric acid solution in the sample, the test solution while also yellow.

A.4 Determination of density A.4.1 Instruments and Equipment with GB/T 4472-2011 the provisions in 4.3.3.2.

A.4.2 Analysis step

With GB/T 4472-2011 the provisions in 4.3.3.3.

The results parallel arithmetic mean of the measurement results shall prevail. Twice under the same condition of independent determination results obtained absolute difference not more than 0.003g/cm³.

A.5 pH measurement

A.5.1 Instruments and Equipment 9724-2007 Chapter 5 with GB/T .

A.5.2 Analysis step

The sample was poured into a beaker been used to determine the following according to GB/T 9724-2007 Chapter 6 were measured.

The results parallel arithmetic mean of the measurement results shall prevail. Twice under the same condition of independent determination results obtained absolute difference not more than 0.2.

A.6 Determination of Arsenic (As) of 5.00mL weighed sample, placed in 100mL beaker, add 8mL hydrochloric acid solution (13), placed on a low-temperature heating furnace to near Dry, remove the cooled to room temperature, add a small amount of water, as the test solution, the following was measured according to GB 5009.76.

A.7 Determination of heavy metals (Pb) of 2.00mL weighed sample, placed in 100mL beaker, add 4mL hydrochloric acid solution (13), placed on a low-temperature heating furnace to near Dry, remove the cooled to room temperature, add a small amount of water, as the test solution, the following was measured according to GB 5009.74.