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

GB/T 11200.2-2008

Replacing GB/T 11200.2-1989

**Sodium hydroxide for industrial use -- Determination of
aluminium oxide content -- Spectrometric method**

高纯氢氧化钠试验方法 第2部分：三氧化二铝含量的测定 分光光度法

(English Translation)

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Foreword

GB/T 11200 "high purity sodium hydroxide test method" is expected to be divided into the following three parts.

--- Part 1. Determination of sodium chlorate o - tolidine spectrophotometry;

--- Part 2. Determination of aluminum oxide content spectrophotometry;

--- Part 3. Determination of calcium content by flame atomic absorption spectrometry.

This section GB/T 11200 Part 2. This portion corresponds to ISO 6353-1. 1982 "General Methods Chemicals" GM9.

Aluminum (in English), and ISO 6353-1. 1982 is equivalent to the degree of non-conformity.

This Part replaces GB/T 11200.2-1989 "Ion-exchange membrane caustic soda in the aluminum oxide content of spectrophotometric law".

This section compared with the GB/T 11200.2-1989 The main changes are as follows.

--- Modify the standard name;

--- Increasing the standard "foreword";

--- Modify the sample size (1989 Edition Chapter 6; edition 6.2);

--- Modify the sample preparation solution (1989 edition, Chapter 6; edition 6.2);

--- Modify the aluminum content is calculated (1989 edition, Chapter 9; Chapter 7 of this edition);

--- Increase the "Test Report" section (see Chapter 9).

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee chlor-alkali chemical branch (SAC/TC63/SC6) centralized.

This section is drafted. Jinxi Chemical Industry Research Institute, Haohua Yuhang Chemical Co., Ltd., Tianjin Dagou Chemical Co., Ltd., Shanghai Chlor-Alkali Chemical Co., Ltd., Zhejiang Juhua Co., Ltd. Hydro plant.

1 Scope

GB/T 11200 provisions of this part of the determination of sodium in high purity aluminum oxide content.

This section applies to sodium hydroxide aluminum oxide content of 0.0001% to 0.005% of the products.

2 Normative references

The following documents contain provisions which, through reference GB/T 11200 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 602 Determination of impurities in chemical reagents prepared standard solution (GB/T 602-2002, ISO 6353-1. 1982, NEQ) with GB/T 603 chemical reagent test method Preparations of articles (GB/T 603-2002, ISO 6353-1 with. 1982, NEQ) GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) Principle 3 in pH4 ~ pH5 acetic acid medium, aluminum and aluminum reagent (Rose tricarboxylic acid ammonium) generate reddish complex, adding a protective colloid, and the solution Color stability absorbance was measured with a spectrophotometer.

4 Reagents and materials

The method of the reagents and water, did not indicate when the other requirements, refer to the three water analytical reagent and GB/T 6682 or as specified Corresponding purity water.

Standard test solution required, the formulations and products in the absence of other provisions, according to GB/T 602, the provisions of the preparation of GB/T 603's.

4.1

hydrochloric acid solution. 15%.

Acetic acid 4.2. 30%.

4.3

ascorbic acid solution. 10%.

4.4

acetic acid - ammonium acetate buffer. pH4 ~ pH5.

4.5

aluminum standard solution. 0.1mg/mL.

4.6

aluminum standard solution. 0.01mg/mL.

Draw 50.00mL aluminum standard solution (4.5) and transferred to 500mL volumetric flask, dilute to the mark, shake. The solution before use preparation.

4.7 Aluminum reagent solution. 0.05%

Weigh 0.25g aluminum reagent and 5g gum arabic powder, dissolved in warm water, then add 87g ammonium acetate, dissolved, add salt 145mL Acid solution was diluted to 500mL, if necessary, filtering, use of one month.

4.8 phenolphthalein indicator solution. 10g/L.