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

**GB/T 11213.1-2007**

Replacing GB/T 11213.1-1989

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**Sodium hydroxide for chemical fiber use -- Determination of  
sodium hydroxide content**

化纤用氢氧化钠氢氧化钠含量的测定

**(English Translation)**

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### Foreword

GB/T 11213 "fiber with sodium hydroxide" is divided into the following sections.

- Part 1. Chemical fiber with sodium hydroxide Determination;
- Part 2. Determination of sodium chloride content of fiber spectrophotometry;
- Part 3. Chemical fiber with sodium hydroxide and calcium content - EDTA complexometric titration;
- Part 4. Determination of chemical fiber with silicon content of sodium molybdate salt spectrophotometric method for reducing silicon;
- Part 5. Determination of fiber with sodium sulfate content;
- Part 7. Determination of synthetic sodium copper content spectrophotometry.

This section GB/T Part 111 213, which corresponds to the international standard ISO 979. 1974 (2002) "Analysis hydroxide for industrial use Method "(in English). This part of ISO 979. 1974 (2002) to modify the use of the degree of consistency.

According to this part of ISO 979. 1974 (2002) redrafted. For ease of comparison, the information in Appendix A lists the provisions of this section List of control clauses with international standards.

Taking into account China's national conditions, at the time of the adoption of international standards, we made some changes. About the technical differences have been incorporated into the text in which they are involved the terms of the margin identified by a single vertical line. In Appendix B gives a list of the technical differences and the reasons for reference.

For ease of use, this section also made the following editorial changes.

- a) "this International Standard" be replaced by "this section";
- b) with a decimal point versus decimal comma ",. ", ";
- c) Remove the cover and introduction of international standards;
- d) increase the informative appendix, for ease of use;
- e) the "amount of substance concentration" instead of "equivalent solutions";
- f) to "1" instead of total alkali content "A";
- g) to "2" in place of the sodium hydroxide level "B".

This Part replaces GB/T 11213.1-1989 "synthetic method for measuring the content of sodium hydroxide (a law)." this section compared with the GB/T 11213.1-1989 The main changes are as follows.

--- Standard different names;

--- Increasing the standard preface;

--- Sample probe different amounts (before version 6.1, this version 6.1);

--- Total Alkalinity different calculation formulas (before version 7.1, this version 7.1);

The formula --- sodium content of different (before version 7.2, this version 7.2);

--- Added "Test Report" section (see Chapter 9).

This section in Appendix A, Appendix B is an informative annex.

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, Ltd. Xilin Gol Sunite alkali industry, Yibin Tianyuan Co., Ltd..

## 1 Scope

GB/T 11213 provisions of this part of the synthetic method for the determination of the content of sodium hydroxide was neutralized with sodium hydroxide. Typically NaOH quality Score two different ways to express.

1 --- Total Alkalinity (NaOH to count);

2 --- sodium content (NaOH dollars), which subtracts the total alkali content of sodium carbonate content.

## 2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this part. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this section, however, encourage the parties to this part of the research agreement Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

Preparation of GB/T 601 chemical reagent standard titration solution GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-1992, neq ISO 3696. 1987) GB/T 7698 industrial use - Determination of carbonate content of sodium hydroxide titration [GB/T 7698-2003, ISO 3196. 1975 (2002), MOD] Principle 3 Methyl orange as indicator, measured as sodium hydroxide and alkali content (as NaOH meter) with hydrochloric acid standard volumetric titration of sodium carbonate solution, Save to sodium content (NaOH dollars), is the content of sodium hydroxide.

## 4 Reagents and materials

Unless otherwise indicated in the analysis using only confirm three water as analytical reagent and GB/T 6682 specified in (non-carbonated) or corresponding purity water.

Standard solution of the test required in the absence of other provisions, according to GB/T 601 provisions prepared.

### 4.1

hydrochloric acid standard titration solution. 1mol/L.

### 4.2

methyl orange indicator solution. 0.5g/L.

Weigh 0.1g of methyl orange, dissolved in 70 °C water, cooled, diluted to 200mL.

## 5 Instruments

The following general laboratory equipment and instruments.

### 5.1

Pipette. 50mL, A grade.

### 5.2

Buret. 50mL, 0.1mL have dividing the value of, A-level.

## **6.1 Preparation of sample solution**

### **6.1.1**

quickly weighed the equivalent of solid sodium hydroxide laboratory samples of 36g ~ 40g (accurate to 0.01g), was dissolved in approximately 200mL water the transferred 1000mL volumetric flask, dilute to near the mark, cooled to room temperature. Dilute to the mark.

### **6.1.2**

Weigh the equivalent of sodium hydroxide liquid laboratory samples of 36g ~ 40g (accurate to 0.01g), moved into 1000mL volumetric flask , Dilute to the mark close, cooled to room temperature. Dilute to the mark.