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

GB/T 9736-2008

Replacing GB/T 9736-1988

**Chemical reagent -- General method for the determination of
acidity and alkalinity**

化学试剂 酸度和碱度测定通用方法

(English Translation)

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Foreword

This standard and ISO 6353-1. 1982 "Chemical analysis of reagent --- Part 1. General test method" non-equivalent.

This standard replaces GB/T "Chemicals acidity and alkalinity determination of the general method," 9736-1988, compared with the GB/T 9736-1988 the main changes are as follows.

--- Improve the water-soluble liquid sample measuring acidity and alkalinity (1988 version 6.1, this version 6.1.1);

--- Modify acidity, alkalinity is calculated and expressed in units of the way (1988 edition, Chapter 7, this edition 6.1.2, 6.2.2).

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee Chemistry Chemicals Branch (SAC/TC63/SC3) centralized.

This standard was drafted. Guangdong Guanghua Chemical Factory Co., Ltd.

1 Scope

This standard specifies the general method for the determination of acidity, alkalinity by titration analysis.

This standard applies to acid, alkali reagent water solubility. Water-insoluble reagent water soluble acids, bases, after water extraction, also Law is available in the aqueous phase measurement.

The determination of acidity or alkalinity use this standard, according to specifications and sample value calculation, the use of alkali or acid standard titration solution standard titration solution drop A given volume of not less than 0.1mL.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

Preparation of GB/T 601 chemical reagent standard titration solution 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)

3 PRINCIPLE OF THE METHOD

Samples were subjected to appropriate treatment, the presence therein of acid or base is transferred to the water or a mixture of water and an organic solvent, in a suitable indicator Under the presence of a predetermined concentration of alkali or acid standard titration solution titration standard solution titration, you can measure the acidity or alkalinity of the sample.

4 Reagents

Unless otherwise specified in this standard, the standard titration solution, formulations and products used, according to GB/T 601, GB/T 603 system requirements Prepare, test water should be consistent with GB/T 6682 in the three water specifications. Titration of the base application of sodium hydroxide standard titration solution preparation, concentration [Ba (OH-)] shall not be less than 0.01mol/L; titration used in the preparation of the acid standard volumetric hydrochloric acid or sulfuric acid solution was applied, the concentration of [Ba (H +)] shall not be less in 0.01mol/L.

5.1.1 Measuring step

Take 100mL carbon dioxide-free water, adding a predetermined indicator, with a base or an acid standard titration solution specified in Standard Solution and, after reaching the end point, the end point indicator color should be maintained for at least 30s. Predetermined amount of the sample (liquid sample added is not greater than 30mL), alkali or acid standard titration solution titrated with standard volumetric solution prescribed, at the finish, ending color indicator should be at least maintained 30s.

5.1.2 Calculation Results

Aqueous samples acidity (in H^+) or alkalinity (OH^-) molality Chou, values
to millimoles per gram (mmol/g) table Shows, according to equation (1).