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

GB/T 13255.6-2009

Replacing GB/T 13255.6-1991

**Test methods of caprolactam for industrial use - Part 6:
Determination of acidity or alkalinity**

工业用己内酰胺试验方法 第6部分：酸度或碱度的测定

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Foreword

GB/T 13255 "Industrial caprolactam test method" is divided into eight sections.

- Part 1. Determination of a 50% aqueous solution of chromaticity spectrophotometry;
- Part 2. Determination of crystallizing point;
- Part 3. Determination of permanganate absorption spectrophotometry value;
- Part 4. After distillation of volatile alkali content of titration;
- Part 5. 290nm wavelength measured absorbance;
- Part 6. Determination of acidity or alkalinity;
- Part 7. Determination of iron content;
- Part 8. Determination of cyclohexanone oxime content. This section GB/T 13255 Part 6. This Part replaces GB/T 13255.6-1991 "industrial caprolactam Determination of acidity or alkalinity." This section compared with the GB/T 13255.6-1991 The main changes are as follows:
 - Will analyze the water level defined as "third grade water GB/T 6682-2008 specified" (1991 edition, Chapter 4, Excerpts Chapter 4).
 - Added "Report" (see Chapter 8). This part is proposed by the China Petroleum and Chemical Industry Association. This part of the National Standardization Technical Committee on Organic Chemistry Club (SAC/TC63/SC2) centralized. This section drafted by: China Petroleum & Chemical Corporation Baling Branch. The main drafters of this section. Zhao Jun red, Shenpei Zhi, Kuang Zhigang. This part of the standard replaces the previous editions are.
 - GB/T 13255.6-1991. Test methods of caprolactam for industrial use Part 6. Determination of acidity or alkalinity

1 Scope

GB/T 13255.6-2009 is the Chinese national standard on test methods of caprolactam for industrial use - part 6: determination of acidity or alkalinity, in the field of chemical technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 13 May 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2010. Classification: ICS 71.080, CCS G15. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

GB/T 13255 provisions of this part of the analysis was determined by titration industrial caprolactam acidity or alkalinity.

2 Normative references

The following documents contain provisions which, through reference

GB/T 13255 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. Preparation of

GB/T 601-2002 Chemical Reagent standard titration solution

GB/T 603-2002 Chemical Reagent Test Methods Preparations with (ISO 6353-1. 1982, NEQ)

GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD)

GB/T 8170 repair value expressed about the rules and limit values \u200b\u200band judgment

3 Method summary

Methyl red - methylene blue ethanol as indicator, titrated with standard sodium hydroxide solution or hydrochloric acid standard titration solution titration, measured Acidity or alkalinity.

4 Reagents and solutions

This part of the reagents and water, refer analytical grade and third grade water GB/T 6682-2008 stipulated. Analysis in the standard titration solution, preparations and products, did not indicate when the other requirements, according to GB/T 601-2002, GB/T 603-2002 Preparation of the provisions.

4.1 sodium hydroxide standard titration solution. $c(\text{NaOH}) = 0.01\text{mol/L}$. The time is now equipped with.

4.2 hydrochloric acid standard titration solution. $c(\text{HCl}) = 0.01\text{mol/L}$. The time is now equipped with.

4.3 methyl red - methylene blue mixed indicator.

5 Instruments

Microburette. volume 1mL or 3mL, dividing the value of 0.01mL. Step

6 Analysis

6.1 Preparation of neutral distilled water The water is placed 250mL 150mL conical flask, add 8 drops of mixed indicator, standard titration with sodium hydroxide solution or hydrochloric acid standard Titration solution titrated to a solution grayish green.

6.2 Determination Weigh about 40g laboratory samples, accurate to 0.1g, dissolved in distilled water poured into neutral. If the solution was purple it indicates acidic, Standard titration with sodium hydroxide solution was titrated to a solution grayish green. If the solution is green is represented as a basic, standard titration with hydrochloric acid solution drops Given to the solution grayish green.