

ICS 83.060

CCS G 35



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

GB/T 21463-2008

Rubber -- Polychloroprene latex -- Determination of alkalinity

氯丁二烯橡胶胶乳碱度的测定

(English Translation)

Issued on: February 26, 2008

Implemented on: August 1, 2008

Issued by: Standardization Administration of China

Table of Contents

Foreword
1 Scope
2 Normative references
4 Reagents
5 Instruments

Foreword

This standard is identical with ISO 13773:1997 "Rubber chloroprene rubber latex - Determination of alkalinity" (in English).

This standard is equivalent to translate ISO 13773:1997.

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

- "This International Standard" be replaced by "this standard";
- Delete foreword international standards;
- International standard references to the corresponding national standards;
- Number of formulas.

The Standard Appendix A, Appendix B are informative appendices.

The standard proposed by China Petroleum and Chemical Corporation.

This standard by the National Standardization Technical Committee rubber and rubber products, synthetic rubber Technical Committee (SAC/TC35/SC6) Centralized.

This standard was drafted. China PetroChina Lanzhou Petrochemical Company Petrochemical Research Institute, Chongqing Changshou Chemical Co.

Liability company.

1 Scope

This standard specifies the method for determination of polymerization with an alkaline emulsifying chloroprene rubber latex alkalinity. This standard does not apply to non Chloride emulsifier prepared butadiene rubber latex and natural rubber latex concentrate, do not necessarily apply to other synthetic neoprene except milk latex.

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.

Laboratory use specifications and test methods (. 1987 neq ISO 3696) GB/T 6682-1992
Analysis SH/T 1149-2006 synthetic rubber latex sample (ISO 123:2001, MOD)
Determination of SH/T 1150-1999 synthetic rubber latex pH value (eqv ISO 976:1996)
Principle 3 Potentiometer titration with hydrochloric acid latex sample into the titration curve (pH range 4-5) in the second inflection point. Depending on the amount of hydrochloric acid required for the count Operators alkalinity.

General test alkalinity expressed in two parts. Part of the titration curve to the first inflection point (pH value range from 10 to 11) desired acid the amount used to determine the amount of free base (alkaline reserve). Another part of the second inflection point on the amount of acid required to titrate curve, used to measure the latex in the amount of surfactant anionic organic saponification, commonly referred to as "delta Titer." Note. When using a pH meter titration control, the general provisions of pH titration curve at the inflection point value of 10.5 and 4.5. However, because these values \u200b\u200bare not necessarily the real turning point Consistent at, so the result is approximate.

4 Reagents

Three using only distilled water or equivalent recognized analytical reagent purity water and non-carbonated (GB/T 6682-1992 specified Grade water).

4.1

Stabilizer solution. mass fraction of 10% of polyethylene oxide condensates of alkyl phenol type nonionic stabilizing agent.

Note: The stabilizer provides the exact categories are not important, but because it gives the acid stability of the latex, and does not interfere with the titration.

4.2

hydrochloric acid standard titration solution. $c(\text{HCl}) = 0.1 \text{ mol/L}$.

5 Instruments

Commonly used laboratory equipment and the following instruments.

5.1

automatic potentiometric titrator. with automatic burette volume up to 50mL.

Note: Allows manual operation of 50mL burette. In this case, we need to determine the approximate initial end.

5.2

Combination pH electrode. interior glass electrode for pH value was up to 14.0.

Magnetic or mechanical stirrer 5.3. You can adjust the speed of the non-metallic magnetic stir bar or rod, the motor should be grounded to avoid interference.

GB/T 21463-2008/ISO 13773:1997