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

GB/T 15916-2012

Replacing GB/T 15916-1995

**Surface active agents -- Determination of chelating agent
content -- Titrimetric method**

表面活性剂 螯合剂含量的测定 滴定法

(English Translation)

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Foreword

This standard rule according to GB/T 1.1-2009 given draft.

This standard replaces GB/T 15916-1995 "chelating surfactant titration Determination", and GB/T 15916-Compared to 1995, the main changes are as follows.

--- Increasing the foreword;

--- Increase the informative Appendix A.

This standard uses redrafted law revision of international standards ISO 4325:1990 "Determination of soap and detergents, chelating Content titration".

This standard and ISO 4325:1990, compared with more adjustment in the structure, are listed in Appendix A of this standard and ISO 4325. Chapter 1990 Article ID Control List.

This standard and ISO 4325:1990 and the technical differences for the following reasons.

--- On normative references, this standard has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

- equivalents adoption of international standards GB/T 6372-2006 instead of ISO 607. 1980 (see Chapter 6);

- Modify with international standards of GB/T 6682-2008 instead of ISO 3696. 1987 (see 4.1);

- increase cited GB/T 622-2006 (see 4.2);

- increase cited GB/T 6368-2008 (see Chapter 7);

- Deleted ISO 385.1. 1984.

--- Increased by 5.3, because the test conditions in Chapter 7 of the steps of heating and stirring.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee Chemistry (specialty) surfactant Technical Committee (SAC/TC63/SC8) centralized.

This standard was drafted. Shanghai Tiantan Auxiliaries Co., Ltd., Zhejiang Real Technology Co., Ltd.

1 Scope

This standard specifies the method for determining the surfactant content of the chelating agent, a chelating agent content of not more than 2% (mass fraction).

This standard applies to surface active agents ethylenediaminetetraacetic acid (EDTA) and its salts Determination of content, in the determination of the content of other chelating agents, Prior to determining the presence or ethylene diamine tetra-acetic acid content of other chelating agent should confirm the applicability of the method.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 622-2006 chemical reagents hydrochloride GB/T 6368-2008 Determination of pH value of an aqueous solution of the surfactant potential method (ISO 4316. 1977, IDT) GB/T 6372-2006 surfactant and detergent sample division method (ISO 607. 1980, IDT) GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) Principle 3 the sample was dissolved in water, the solution was adjusted to pH 4.6, 1- (2-pyridyl) azo-2-naphthol as an indicator, with drops of copper sulfate standard Fixed titration.

4.1 Test water

Third grade water requirements of GB/T 6682-2008 prescribed.

4.2 Hydrochloric acid solution

Meet the technical requirements GB/T 622-2006 a, c (HCl) = 5mol/L.

4.3 Acetic acid buffer solution

pH = 4.6, the $c(\text{CH}_3\text{COOH}) = 0.4\text{mol/L}$ in acetic acid and $c(\text{NaOH}) = 0.2\text{mol/L}$ sodium hydroxide solution an equal volume of mixed preparation.

4.4 Copper sulfate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$) Standard Solution

$c(\text{CuSO}_4) = 0.0100\text{mol/L}$, weighed purity of 99% (mass fraction) of copper sulfate pentahydrate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$) 2.522g, accurate to 0.001g, dissolved in water and diluted to 1000mL, and mix.