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

GB/T 7385-2012

Replacing GB/T 7385-1994

**Non-ionic surface active agents -- Polyethoxylated derivatives --
Iodometric determination of oxyethylene groups**

非离子型表面活性剂 聚乙氧基化衍生物中氧乙烯基含量的测定 碘量法

(English Translation)

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Foreword

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

This standard replaces GB/T 7385-1994 "nonionic surfactant polyethoxylated derivatives measured oxygen content of the vinyl Iodimetry ", compared with the GB/T 7385-1994, the main changes are as follows.

- Increasing the foreword;
- Change the "starch solution" method of preparation (see 4.7,1994 version 4.7);
- Added "blank test" (see 6.3);
- Added "Test Report" (see Chapter 8).

This standard uses redrafted law revision adopted ISO 2270. 1989 "nonionic surfactant polyethoxylated derivatives of oxygen Vinyl groups iodometric determination. " this standard and ISO 2270. 1989 compared to the more structural adjustment, listed in Appendix A of this standard and ISO 2270. 1989's Reg number control list.

This standard and ISO 2270. 1989 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.

- increase cited GB/T 601-2002 (see 4.6);
- increase cited GB/T 683-2006 (see 4.4);
- increase cited GB/T 1272-2007 (see 4.2);
- increase cited GB/T 1282-1996 (see 4.3);
- increase cited GB/T 6682-2008 (see 4.1);

- Remove the ISO 383. 1976 and ISO 385.1. 1984.

--- Increased 5.5, in order to test the operation more convenient, easy placement of said rod-like;

--- 1 increase in F, because "instruments and equipment" have been added to said rod-like outlet should also be given icon.

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. Zhejiang Real Technology Co., Ltd.

1 Scope

This standard specifies the determination of the oxygen content of poly vinyl surfactant oxyethylene groups by iodometry.

This standard applies to primary saturated fatty alcohols, oleyl alcohol, saturated fatty acids, linear and branched alkylphenols ethoxylated derivatives. If Yan Organisms unreacted alcohols, fatty acids or alkylphenols exist, this standard applies.

If a nitrogen or sulfur-containing derivatives, oxyethylene connecting adjacent carbon atoms contain oxygen or halogen (e.g. oxygen-propenyl), an aldehyde or acetal, Sterols, etc. This standard does not apply.

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.

Preparation of GB/T 601-2002 Chemical reagents Titration standard solution GB/T 683-2006 Chemicals Methanol GB/T 1272-2007 chemical reagents potassium iodide GB/T 1282-1996 chemical reagents phosphate (ISO 6353-2. 1983, MOD) GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) Principle 3 Hydroiodic acid hydrolysis of vinyl oxygen generated by the new, liberated iodine with sodium thiosulfate standard solution titration to calculate the mass of oxyethylene Volume fraction.

The basic reaction is as follows.

RO- (CH₂CH₂O) nH 2nHI -> nICH₂-CH₂I ROH nH₂O Unstable diiodo ethane is decomposed under heating.

ICH₂-CH₂I -> C₂H₄ I₂

NOTE: If R is an alkyl group, ROH will be converted to vinyl groups RI (oil and alcohol, all vinyl groups) will react with HI, to form a stable.

Iodide.

4.1 Test water

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

4.2 Potassium iodide

Meet the technical requirements GB/T 1272-2007 of.