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

GB/T 9726-2007

Replacing GB/T 9726-1988

**Chemical reagent -- General rule for the determination of
permanganate-reducing substances**

化学试剂 还原高锰酸钾物质测定通则

(English Translation)

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Foreword

This standard and ISO 6353-1. 1982 "Reagents for chemical analysis - Part 1. General test method" non-equivalent.

This standard replaces GB/T 9726-1988 "chemical reagents potassium permanganate reducing substances determination Law", and GB/T 9726-1988 phase Than the main changes are as follows.

--- Modify the contents of the principle of the method (see Chapter 3);

--- Cancel the 1988 edition of Appendix B.

Appendix A of this standard is an informative annex.

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 direct method (visual colorimetric method) and indirect methods (titration analysis) Determination of permanganate reducing substances in the general method.

This standard applies to the direct method neutral alcohols, ketones, or other neutral,

weakly alkaline reduction test sample containing substances of low potassium permanganate Set; indirect method for sample reaction to restore higher levels of potassium permanganate, potassium permanganate reducing substance or substances in the sample than with potassium permanganate Determination difficult performed.

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 6682-1992, neq ISO 3696. 1987)

3 PRINCIPLE OF THE METHOD

Under certain conditions, the test solution of potassium permanganate reducing substances can react with potassium permanganate, so that the test solution fade.

3.1 Direct Method

According to the standard potassium permanganate titration solution concentration, size and degree of fading can be given potassium permanganate reducing substances semiquantitative result.

3.2 Indirect method

Determination of residual use of potassium permanganate iodometry, potassium permanganate reducing substance can be obtained mass fraction.

4 Reagents and materials

Unless otherwise specified, the standard titration solution, preparations and products, according to GB/T 601, the provisions of the preparation of GB/T 603, the test water shall comply with GB/T 6682 water in three specifications, are used in the mass fraction solution "%" represents.

5 Instruments and devices

5.1

General laboratory equipment.

5.2

microburette.

6.1 Direct Method

Sampling and preparation of test solution by product standards, put ground glass colorimetric tube, add a predetermined volume of potassium permanganate Standard Solution [$\text{Ba (15KMnO}_4\text{)} = 0.1\text{mol/L}$], cover the plug at a predetermined temperature in the dark for a predetermined period of time. Pink solution was observed no completely disappear. Calculation Method See Appendix A.