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

GB/T 22598-2008

Water treatment chemicals - Determination of lead content

水处理化学品 铅含量测定方法

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Foreword

The standard proposed by China Petroleum and Chemical Industry Association. This standard by the National Standardization Technical Committee of Chemical Water Treatment Chemicals Branch (SAC/TC63/SC5) centralized. This standard is drafted by: CNOOC Tianjin Chemical Research & Design Institute. The main drafters of this standard. Li Lin, Shao Hongqian, Bai Ying. Water treatment chemicals Determination of lead content

1 Scope

GB/T 22598-2008 is the Chinese national standard on water treatment chemicals - determination of lead content, 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 23 December 2008 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 September 2009. Classification: ICS 71.040.40, CCS G76. 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.

This standard specifies the method of water treatment chemicals in atomic absorption spectrometry of lead content. This standard applies to chemical test solution lead content in the range of 0.5μg ~ 9.0μg the water treatment.

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.

GB/T 602 Determination of impurities in chemical reagents prepared standard solution (GB/T 602-2002,

ISO 6353-1. 1982, NEQ) with

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

3 Method summary

The sample was added nitric acid and hydrogen peroxide, the sample is dissolved in the lead, then the determination of lead content by atomic absorption spectrometry.

4 Reagents and materials

The reagents used in this standard, unless otherwise specified, shall use analytical reagent and in line with GB/T 6682 stipulated two of water. Impurity standard solution at the time did not indicate other requirements, according to the provisions of GB/T 602 of the test preparation needed. Safety Tips. strong acids used in this standard is corrosive, should pay attention. When contacted, rinse with plenty of water, avoid inhalation or Contact with the skin.

4.1 Hydrogen peroxide. pure class distinctions.

4.2 nitrate (excellent pure) solution. 1 + 1.

4.3 nitrate (excellent pure) solution. 1 + 199.

4.4 lead standard stock solution. 0.1mg/mL.

4.5 Lead standard solution. 1µg/mL. Accurate Pipette 5.0mL lead standard stock solution was placed in 500mL volumetric flask, dilute nitric acid solution (4.3) to the mark. this Now with the existing solution.

5 Instruments and equipment

5.1 Atomic absorption spectrometer. with graphite furnace control device, lead hollow cathode lamp, deuterium lamp or Zeeman background correction means.

5.2 argon cylinders. 5.3 20µL micro quantitative samplers.

Note. All glassware must be cleaned with a solution of nitric acid (4.2), then wash with water. Step

6 Analysis

6.1 Preparation of test solution Accordance with the relevant provisions of the standard product weighed amount of sample is placed in 250mL beaker, dissolved in water to 100mL, carefully added 2.0mL 2.0mL solution of hydrogen peroxide and nitric acid (4.2), the solution was heated and evaporated to a volume of about 40mL, cooled to room temperature, the solution after Full transferred to 100mL volumetric flask, add water to the mark.