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

GB/T 15893.1-2014

Replacing GB/T 15893.1-1995

**Industrial circulating cooling water -- Determination of turbidity
-- Diffused radiation method**

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Table of Contents

Foreword

1 Scope

2 Normative references

3 Method summary

4 Reagents and materials

5 instruments and equipment

5.1 scattered light turbidity meter

Foreword

This standard was drafted in accordance with the rules given in GB 1.1-2009.

This standard replaces GB/T 15893.1-1995 "Industrial circulating cooling water turbidity measuring scattered light method" and GB/T 15893.1-

Compared to 1995, the main technical changes are as follows.

--- Turbidity units FNU replaced by the NTU;

--- Increased formazin turbidity standard solution preparation list (see 4.3);

--- Modify the scattered light turbidity meter light source incident light angle and measure the receiver (see 5.1, version 5.1 in 1995).

The standard reference method using redrafted ISO 7027.1999 "Determination of water turbidity of the" establishment, and ISO 7027.1999's

Non-equivalent.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee chemical water treatment chemicals Technical Committee (SAC/TC63/SC5) centralized.

This standard is drafted by. Hao bright Chemical Research and Design Institute Co., Ltd. Hangzhou-China environmental protection equipment factory in Guangzhou City special pressure

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North of Beijing Yanshan Branch hospital, CNOOC Tianjin Chemical Research & Design Institute, Chongqing University.

1 Scope

This standard specifies the method for measuring scattered light industrial circulating cooling water turbidity.

This standard applies to the determination of industrial circulating cooling water turbidity measurement range 0NTU ~ 50NTU.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein

Member. For undated references, the latest edition (including any amendments) applies to this document.

Laboratory use specifications and test methods GB/T 6682-2008 Analysis

3 Method summary

This standard formazin polymer (Formazinpolymer) as turbidity standard solution, with the principle of scattered light turbidity meter measuring water

Sample turbidity.

4 Reagents and materials

4.1 standard reagents and water, unless otherwise specified, shall use analytical reagent and in line with GB/T 6682-2008 in two water

Provisions.

4.2 formazin turbidity standard stock solution. 400NTU. Weigh 10.00g +/- 0.01g hexamethylenetetramine, dissolved in water and diluted to

100mL, this is the A solution; weighing 1.000g +/- 0.001g of hydrazine sulfate, dissolved in water and diluted to 100mL, this is a solution B; pipette

A solution 5mL and 5mL solution B, mixing, placing 24h at 25 degrees C +/- 3 degrees C, then diluted with water to 100mL, that is formalin

Hydrazine turbidity standard stock solution. The solution at 25 degrees C +/- 3 degrees C in the shade storage, stable 30d.

4.3 formazin turbidity standard solution. Table 1 using a pipette to take a certain volume of

formazin turbidity standard stock solution was diluted with water to

100mL, to formulate the required turbidity formazin turbidity standard solution, stable period of 7d.

Table 1 formazin turbidity standard solution preparation (0NTU ~ 50NTU)

Take turbidity standard volume of stock solution/mL 0 1.25 2.50 3.75 5.00 7.50 10.00 12.50

Turbidity standard solution turbidity/NTU 0 5 10 15 20 30 40 50

5.1 scattered light turbidity meter

5.1.1 source. equipped with a monochromator tungsten, or monochromatic light emitting diodes, or monochrome lasers, visible light can also be used.