Chinastandards.org

ICS 75.040
CCS E21

SN

INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

SN/T 3185-2012

Determination of halogen in crude oil. Oxygen bomb combustion-ion chromatography

原油中卤素含量的测定 氧弹燃烧-离子色谱法

(English Translation)

Issued on: May 7, 2012 **Implemented on: November 16, 2012**

Issued by: General Administration of Customs

Preview: page 1 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3185-2012

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative references

3 Method summary

4 Reagents and materials

Foreword

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

This standard is proposed and managed by the National Certification and Accreditation Administration Committee.

This standard was drafted. People's Republic of China Ningbo Exit Inspection and Quarantine.

1 Scope

This standard specifies the oxygen bomb combustion - ion chromatography method for the determination of crude chlorine, bromine content.

This standard applies to crude oil (excluding condensate) determination of chlorine, bromine.

Determination of the chlorine standard lower limit of 10mg/kg, the lower limit for the determination of bromine 2mg/kg.

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.

GB/T 4756 petroleum liquids hand sampling method Laboratory use specifications and test methods GB/T 6682 Analysis

3 Method summary

Sample in an oxygen bomb combustion system is oxidized by the chlorine compounds, bromine is converted to the chloride, bromide, solution absorption, after absorption the

Preview: page 2 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3185-2012

solution was determined by ion chromatography, external standard.

4 Reagents and materials

Unless otherwise indicated, the reagents used were of analytical grade, the water should meet the requirements of a water GB/T 6682 stipulated.

4.1
Sodium carbonate. reference reagents.

4.2
sodium bicarbonate. reference reagents.

4.3
methanol.

4.4
acetone.

4.5
isopropanol.

4.6 4-chloro-benzoic acid.

4.7 4-bromobenzoic acid.

Sodium carbonate, sodium bicarbonate 4.8 absorbing liquid (4.8mmol/L sodium carbonate 1.0mmol/L sodium bicarbonate). Weigh 0.5088g sodium carbonate (4.1) (accurate to 0.1mg) and 0.0840g of sodium bicarbonate (4.2) (accurate to 0.1mg), was dissolved in 1L of water.

4.9
Quality control substance. Weigh 0.1103g4- chloro-benzoic acid (4.6) (accurate to 0.1mg) and 0.0629g4- bromo benzoic acid (4.7) (fine Accurate to 0.1mg), with 50g methanol (4.3) was dissolved, the quality control substance chlorine, bromine content of each of 500mg/kg.

4.10
Oxygen. purity >=99.9%.

4.11
chlorine, bromine ion standard solution (1000mg/L).

4.12
chlorine, bromine ion standard stock solution (10mg/L). absorb chlorine, bromine ion standard solution 1.0mL (4.11), with ultrapure water to volume 100mL.

Preview: page 3 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3185-2012

Chinastandards.org

4.13

chlorine, bromine ion standard solution. Imbibe 0.1mL, 0.5mL, 1mL, 2mL, 5mL, 10mL chlorine, bromine ion standard Stock solution (4.12) in 100mL flask, water volume. The concentration of the working standard solution were 0.01mg/L, 0.05mg/L,

Preview: page 4 of 4 shown, 6 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/sn-t-3185-2012