

ICS 75.040
CCS E 21

SN

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

SN/T 2782-2011

Determination of salts in crude oil. Electrometric method

原油中盐含量的测定 电测法

(English Translation)

Issued on: February 25, 2011

Implemented on: July 1, 2011

Issued by: General Administration of Customs

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions
4 Summary
5 Instruments

Foreword

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

This revised standard adopts the American Society for Testing and Materials standard ASTM D3230-09 "Standard Test Method for crude oil salt content (measuring law)".

This standard part ASTM D3230-09 made the following modifications.

- References of standards adopted corresponding national standards;
- Delete the original standards and technical requirements of irrelevant content (Chapter No. 5, 15);
- Remove A Homemade Instruments section of the appendix of the original standard.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

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

This standard was drafted. People's Republic of China Shandong Entry-Exit Inspection and Quarantine, Ningbo People's Republic of China Bureau, People's Republic of China Guangdong Entry Inspection and Quarantine Bureau.

1 Scope

This standard specifies the electrical measurement method for the determination of crude chloride (salt) concentration of an approximate measurement range (0 ~ 500) mg/kg.

This standard is applicable to the determination (salt) concentration of chloride in the crude oil.

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 6682 Analysis GB/T 8019 motor gasoline and aviation fuel gum assay (Jet evaporation method) Determination of GB/T 8929-2006 water content of crude oil distillation

3 Terms and Definitions

The following terms and definitions apply to this document.

Crude salt salts in crude oil Crude oil was dissolved in sodium chloride, calcium chloride, magnesium chloride. Other inorganic chloride may also be present.

4 Summary

The crude sample was dissolved in a mixed homogeneous alcohol solvent, and placed in a beaker and the test unit consisted of a set of electrodes. It is applied to the electrodes a Constant voltage, measured current, the control current - the salt content of the calibration curve, the salt content of the sample. Establish a standard curve using a standard test substance Crude oil type and concentration of chloride to be similar.

5 Instruments

5.1

by the instrument capable of generating and displaying several voltage levels of the control unit, this control unit is able to mount in a beaker containing the test solution Applying a voltage to the electrodes. The instrument should be capable of measuring and displaying voltage level between the two electrodes at each test solution current (mA). See Appendix A.

Note: Some instruments can measure voltage and current, and in comparison with the standard curve of internal storage, the salt content is displayed directly.

5.2

test beaker. See Appendix A.

5.3

Pipette. 10mL (single scale), the viscosity of the crude oil sample appropriate, for 9.3 and 10.1 step Pipette and neutral oil Crude oil samples. Pipette should be easy to clean, test solution to ensure complete transfer. In a large sample of crude oil viscosity, it is difficult

with a pipette Take samples available 10mL measuring cylinder samples. To be consistent, neutral oil is also taken with a graduated cylinder. This standard is the use of precision pipetting Under the circumstances tube obtained.

5.4

cylinder. 100mL, with stopper.

5.5

Other size and scale of pipettes and flasks.