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

SN/T 2422-2010

**Determination of nitrogen in petroleum coke for import and
export. Thermal conductivity method**

进出口石油焦中氮的测定 热导法

(English Translation)

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Foreword

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

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

1 Scope

This standard specifies the method for measuring the thermal conductivity of the import and export of petroleum coke nitrogen content.

This standard applies to the determination of the import and export of petroleum coke nitrogen content.

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.

SH/T 0313 Petroleum coke Inspection Act

3 Method summary

In the presence of oxygen at high purity, high temperature combustion of nitrogen in the form of free nitrogen and nitrogen oxides released from petroleum coke, filtered combustion After the resulting sulfur oxides and halides, and nitrogen oxides generated by the catalytic reduction furnace into N₂, and then the carbon dioxide absorbent and desiccant Respectively, CO₂ and H₂O removed using N₂ and He thermal conductivity differences in thermal conductivity detector quantitative detection of N₂ content, the arithmetic After the processing of petroleum coke derived nitrogen content.

4 Reagents and materials

4.1

Sucrose. AR.

4.2

Helium. the carrier gas, the purity of 99.999% or meet instrument manufacturer.

4.3

oxygen. combustion gas, 99.999% purity or meet instrument manufacturer.

4.4

nitrogen or compressed air. air power.

4.5

Coal standard substance. the nitrogen content of between 1% to 3%.

4.6

EDTA standard. high purity.

4.7

tinfoil.

5 Equipment

5.1

Method nitrogen thermal conductivity detector. a burner, filtration systems, catalytic heating pipe, thermal conductivity detector, a microprocessor.

This standard is recommended to use the instrument manufacturer's equipment supplies such as. furnace reagents, filter materials, catalysts, reducing agents, such as the desiccant.

5.2

Balance. a sense of the amount of 0.1mg.

6 Sampling and Preparation

The samples were taken in accordance with the provisions of SH/T 0313's. Test sample for analysis, in accordance with the provisions of SH/T 0313 is prepared Particle size less than air dry or dry sample of 75 μ m.

7.1 Instrument Preparation

Setting the combustion temperature of 950 °C $\pm$ 20 °C, by observing the combustion of the sample, adjusting the flow rate of oxygen, combustion time and other instrument parameters to Samples can ensure complete combustion.