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

GB/T 26930.1-2011

**Carbonaceous materials for the production of primary
aluminium -- Pitch for electrodes -- Part 1: Determination of
water content -- Azeotropic distillation (Dean and Stark) method**

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Foreword

GB/T 26930 "carbonaceous materials used in aluminum production bituminous coal" There are five sections.

--- Part 1. Determination of moisture content - Azeotropic distillation method;

--- Part 2. Determination of softening point and ball method;

--- Part 3. Determination of density Pyknometer;

--- Part 4. Determination of quinoline insoluble content;

--- Part 5. Determination of toluene-insoluble matter content.

This is Part 1.

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

This section uses the translation method identical with ISO 5939. 1980 "carbonaceous materials used in aluminum production bituminous coal moisture content measured

Given azeotropic distillation. " This part identical with ISO 5939. 1980, the deleted its preamble and references.

Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 26297.5 carbonaceous materials used in aluminum sampling method - Part 5. coal tar pitch (ISO 6257.2002, MOD);

--- GB/T 26930.2 carbonaceous materials used in aluminum production coal tar pitch - Part 2. Determination of softening point Ring and ball method

(ISO 5940. 1981, IDT).

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1 Scope

This section GB/T 26930 specifies the method for determination of primary aluminum production in the moisture content of coal pitch.

This section applies to the determination of primary aluminum production in the moisture content of coal pitch. Measurement range of 0.1% to 2.0% (mass fraction).

NOTE. When the water content is more than 2.0% (mass fraction), using a larger test of the method used by the receiver.

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

GB/T 26930.2 carbonaceous materials used in aluminum production bituminous coal Determination of softening point and ball method (GB/T 26930.2-2011,

ISO 5940. 1981, IDT)

ISO 383 standard laboratory glassware with conical glass ground joints (Laboratory glassware-Interchangeable

conical ground joints)

ISO 6257 carbonaceous materials used in aluminum bituminous coal sampling method (Carbonaceous materials used in the production of

aluminium-Pitch for electrodes-Sampling)

3 PRINCIPLE OF THE METHOD

Under xylene reflux with hot asphalt. Xylene and water was collected in the receiver condensate in the graduated within the receiver

Measuring the volume of distilled water, to calculate the moisture content.

4 Reagents

4.1-xylene, or mixtures of these isomers in any proportions synthesis (analytical) or its isomer, to ensure that at 130 degrees C ~

Can boiling between 140 degrees C.

5.1 azeotropic distillation apparatus is shown in Figure 1, it consists of the following parts.

5.1.1 distillation flask. glass, a 500 mL volume, frosted glass interface (shown in Figure 1, in line with ISO 383), fixed to the receiver

(5.1.2) on.

5.1.2 Receiver. volume of 2mL, with a scale, indexing is 0.05mL, the maximum error of +/- 0.02mL, shown in Figure 2.

Note. If the pitch is greater than the moisture content of 2.0% (mass fraction), using a volume of 10mL, the maximum error of +/- 0.06mL, indexing is 0.2mL access

Receiver.

5.1.3 reflux condenser. with the receiver (5.1.2) connection, see Figure 3.

Note. Before use, wash sequentially with dichromate, distilled water, thoroughly washed with acetone receiver and reflux condenser, drying, blot to remove all the above.