

ICS 75.160
CCS D21



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

GB/T 18856.2-2008

Replacing GB/T 18856.2-2002

**Test methods for coal water mixture - Part 2: Determination of
mass percentage of solid**

水煤浆试验方法 第2部分: 浓度测定

Issued on: July 29, 2008

Implemented on: April 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

The revised GB/T 18856 Test Methods for Coal Water Mixture is divided into 7 parts.

2.Determination of Mass Percentage of Solid;

3.Sieving Method;

4.Determination of Apparent Viscosity;

5.Determination of the Stability;

6.Determination of Density;

7.Determination of pH Value. This Standard serves as a replacement for GB/T 18856-2002 Test Methods for Quality of Coal Water Mixture. In comparison with GB/T 18856-2002, the main differences are as follows:

---Part 6 - Determination of Calorific Value of Coal Water Mixture is deleted;

---Part 7 - Proximate Analysis of Coal Water Mixture is deleted;

---Part 8 - Determination of Total Sulfur in Coal Water Mixture is deleted;

---Part 10 - Determination for Fusibility of Ash of Coal Water Mixture is deleted;

---Part 11 - Determination of Carbon and Hydrogen in Coal Water Mixture is deleted;

---Part 12 - Determination of Nitrogen of Coal Water Mixture is deleted;

---Part 13 - Determination for the Ash of Coal Water Mixture is deleted. The deleted contents have been respectively integrated into the relevant standards for the determination of coal and coal ash. This Part is Part 2 of this version of GB/T 18856. This Part serves as a replacement for GB/T 18856.2-2002 Test Methods for Quality of Coal Water Mixture - Part

1 Scope

GB/T 18856.2-2008 is the Chinese national standard on test methods for coal water mixture - part 2: determination of mass percentage of solid, in the field of petroleum and related technologies. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 29 July 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2009. Classification: ICS 75.160, CCS D21. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Part of GB/T 18856 specifies the instruments, equipment, procedures, result calculation, and method precision for determining the mass percentage of coal water mixture. This Part applies to various types of coal water mixture.

2 Normative References

The clauses in the following documents become clauses of this Part of

GB/T 18856 through reference. For dated referenced documents, all subsequent amendments (excluding errata) or revisions are not applicable to this Part. However, parties to agreements based on this Part are encouraged to investigate whether the latest versions of these documents can be used. For undated referenced documents, the latest versions apply to this Part.

GB/T 18856.1 Test Methods for Coal Water Mixture - Part

3 Specimen Collection and Preparation

The collection and preparation of coal water mixture specimens shall be carried out in accordance with GB/T 18856.1.

4 Method A - Oven Drying Method (arbitration method)

4.1 Method Summary Weigh-take a certain amount of coal water mixture specimen and dry it at 105 C ~ 110 C, until the mass is constant. The mass fraction of the dried specimen relative to the original specimen mass shall be taken as the mass percentage of the coal water mixture.

4.2 Instruments and Equipment

4.2.1 Drying oven. equipped with an automatic temperature control device and a blast blower, capable of maintaining a temperature of 105 C ~ 110 C.

4.2.2 Weighing bottle. 50 mm in diameter, 30 mm in height, with a tight-fitting ground cap.

4.2.3 Analytical balance. with a division value of 0.0001 g.

4.2.4 Desiccator. filled with color-changing silica gel or granular anhydrous calcium chloride.

4.3 Determination Procedures

4.3.1 Take (3.0 ± 0.2) g of thoroughly stirred coal water mixture specimen and place it in a pre-dried and weighed (accurate to 0.0002

g) weighing bottle. Quickly cap the bottle, weigh (accurate to 0.0002 g), and shake to level it.

4.3.2 Open the cap and place the weighing bottle and cap into a drying oven that has been pre-blasted and heated to 105 C ~ 110 C. Under air-blasting conditions, dry for 1 hour.

4.3.3 Remove the weighing bottle from the drying oven, immediately cap it, and cool it in air for about 3 minutes. Then, place it in a desiccator and cool to room temperature (about 20 minutes). Weigh the bottle.

4.3.4 Perform confirmatory drying for 30 minutes each time, until the mass decrease of the specimen between two consecutive drying cycles does not exceed

0.003 g or the mass increases. In the latter case, the mass before the increase shall be used as the basis for calculation.

4.4 Calculation of Results The mass percentage of coal water mixture is calculated in accordance with Formula (1). Where, C

---the concentration of coal water mixture, expressed as a mass fraction, in (%); m_1

---the mass of the dried specimen, expressed in (g); m_0

---the mass of the specimen, expressed in (g). The determination result of the mass percentage of coal water mixture is rounded to one decimal place.

4.5 Method Precision The repeatability limit of the determination result of the mass percentage of coal water mixture is 0.2%.