

ICS 71.080

CCS G18



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

GB/T 2281-2008

Replacing GB/T 2281-1996

Determination of density of coking oil products

焦化油类产品密度试验方法

Issued on: May 13, 2008

Implemented on: November 1, 2008

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

Table of Contents

- 1 Scope
- 2 Normative references
- 4 Instrument
- 5 Test procedure

Foreword

The integration of standard GB/T 2281-1996 "coker gas oil products density test method" and GB/T 15243-1994 "Coking viscous oil Products Density Test Method "in the revision process, the method of determination of two light oil products and oil products sticky density into one. This standard replaces GB/T 2281-1996 and GB/T 15243-1994. This standard and GB/T 2281-1996, GB/T 15243-1994, compared mainly to do with the following modifications. After

- integrate standard entitled "Standard Test Method for Density of coking oil products."
- Added "Warning", "normative references."
- "Range" to apply densitometry coking oil products.
- "Test principle" than previously described in more explicit.
- "Test equipment" in the cylinder is given a minimum density meter specified in Appendix B of coking products or in compliance with specific density meter SH/T 0316 in the SY-05 oil standard density meter.
- "Test step" method for determining the density of light oil and combined oil viscosity, density determination and sticky oil products added at the front Processing steps. Increasing the sample processing steps.
- Appendix B to cancel the original density coefficient table.
- Abolition of the "8 arbitration." This standard Annex A, Annex B normative appendix. The standard proposed by China Iron and Steel Association. This standard is under the jurisdiction of Metallurgical Industry Information Standards Institute. This standard was drafted. Inner Mongolia Baotou Steel Gangliangufen Co., Metallurgical Industry Information Standards Institute. The main drafters of this standard. segment Sulan, ZHAO Yong, Zhang Tong mountain, Pangwen Juan, Xie Xiaoxia, Ning Yuping, Sun Wei. This standard replaces the previous standard published case.
- GB 2281-1980, GB 8032-1987, GB/T 2281-1996;

--- GB 3065.1-1982, GB 8352.1-1987, GB/T 15243-1994. Coking oil products density test method Warning. flammable hazardous coking oil products for skin and eye irritation, there is risk of inhalation of toxic gases or invade the skin, to wear protective Masks, protective glasses and protective gloves, test operations to be carried out in a forced air hood, keep a distance from the source of fire.

1 Scope

GB/T 2281-2008 is the Chinese national standard on determination of density of coking oil products, in the field of chemical technology. 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 13 May 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 November 2008. Classification: ICS 71.080, CCS G18. 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 standard specifies the coking oil products density test principle, test equipment, test procedure, the results of calculation of repeatability. This standard applies to the density determination coking oil products.

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.

GB/T 8170 numerical rounding rules YB/T 2305 coking products Glass thermometers SH/T 0316 Petroleum hydrometer Principle

3 The sample under test temperature, density with a predetermined density of the sample was measured by. The sample to be stationary, the temperature reached equilibrium, record Thermometer and hydrometer readings, converted to density at 20 °C, the symbol ρ_{20} expressed in units of g/cm³.

4 Instrument

4.1 Density measurement tube. made of transparent glass with an inner diameter of at least than the density meter (4.2) outer diameter of 25mm, the height should make density meter

test Like when floating, density meter at the bottom of the bottom of the cylinder spacing of at least 25mm.

4.2 density meter. density meter used should be consistent with the provisions of Appendix B of coking products or in compliance with specific density meter SH/T 0316 in the SY-

05 Oil standard density meter.

4.2.1 three kinds of benzene density meter range. 0.8500 ~ 0.9000, g/cm³, the ruled is 0.0005g/cm³.

4.2.2 Other products by density meter range. 0.830 ~ 0.890, 0.890 ~ 0.950, 0.950 ~ 1.010, 1.010 ~ 1.070, 1.070 ~ 1.130, 1.130 ~ 1.190, 1.190 ~ 1.250, g/cm³, sub-grid value 0.001g/cm³.

4.3 Thermometer. 0 °C ~ 50 °C, in line with the provisions of YB/T 2305 in COK9C thermometer.

4.4 water bath. water bath.

5 Test procedure

5.1 The mixed sample. Sticky oil products was slowly heated in a water bath of less than 60 °C, while heating with stirring to dissolve all, except To the upper portion of the visible water.

5.2 according to the requirements of Table 1, the mixed sample, carefully poured into clean, dry density measurement tube, avoiding splashing the sample and generate air Bubble, samples taken below the liquid level in the density of the cylinder placed along the 35mm ~ 40mm, sticky oil products will be pre-heated to a density metering cylinder 40 °C ~ 50 °C (wash oil 15 °C ~ 35 °C without preheated) water bath, gently insert the thermometer in the sample, when the sample temperature reaches a predetermined Temperature range, the hydrometer gently inserted until the hydrometer and temperature are stable, the reading remember sample temperature, and simultaneously press the densitometer provisions Reading Notes apparent density, ρ_{a0} to represent. When reading the value of the sample does not allow air bubbles, density meter is not in contact with the cylinder wall, the shape of the meniscus Should remain unchanged.