

ICS 13.300
CCS A 80



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

GB/T 21862.4-2008

**Paints and varnishes -- Determination of density -- Part 4:
Pressure cup method**

色漆和清漆 密度的测定 第4部分：压杯法

(English Translation)

Issued on: May 12, 2008

Implemented on: September 1, 2008

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 5 Temperature
- 6 Instruments
- 6.1 Pressure Cup

Foreword

GB/T 21862 "Paints and varnishes - Determination of density" includes the following four parts.

- Part 2. Falling Ball Method;
- Part 3. vibration method;
- Part 4. Pressure cup method;
- Part 5. hydrometer method.

This is Part 4 GB/T 21862 of.

This section is equivalent to using the ISO 2811-4:1997 "Paints and varnishes - Determination of density - Part 4. Pressure cup method" (in English).

This part of ISO 2811-4:1997 compared to do the following editorial changes.

- With "this Part" instead of "ISO 2811 part of this";
- Use has been tantamount to the adoption of national standards instead of into the corresponding international standards or foreign standards;
- With a decimal point instead of a comma as the decimal point, "";
- Delete international standards foreword.

GB/T 21862 "Paints and varnishes - Determination of density," the relevant standards. GB/T 6750-2007 test "Paints and varnishes density Given pycnometer method "(ISO 2811-1:1997, IDT).

Appendix A of this section is normative appendix, Appendix B is an informative annex.

This part of the National Chemicals Management Standardization Technical Committee dangerous (SAC/TC251) and focal points.

This section is responsible for drafting. Jiangsu Entry-Exit Inspection and Quarantine Bureau.

Participated in the drafting of this section. the Chemical Institute of Standardization, Marine Chemicals Research Institute, China National Chemical Construction Corporation of Changzhou coating Power Research Institute.

1 Scope

This section provides a method for determining the pressure cup Paints, varnishes and related products density.

This method is applicable to samples containing air bubbles, such as emulsion paints often contain small air bubbles and these bubbles still in the determination of density exist.

2 Normative references

The following documents contain provisions which, through reference GB/T 21862 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 3186-2006 Paints, varnishes and raw materials for paints and varnishes - Sampling (ISO 15528:2000, IDT) GB/T 20777-2006 Paints and varnishes examination and preparation of samples (ISO 1513:1992, IDT) ISO 3696. 1987 laboratory use - Specification and test methods

3 Terms and Definitions

The following terms and definitions apply to this section.

The ratio of material quality and volume, expressed in grams per milliliter (g/mL).

Principle 4

The sample is compressed in a cylindrical pressure cup to eliminate measurement errors in the sample is not divisible by air bubbles arising. Dense samples Degree can pressure cup quality and volumes calculated.

5 Temperature

5.1

relative filling properties, the effect of temperature on the density is large, and with the product type.

5.2

part of the provisions of $23\text{ }^{\circ}\text{C} \pm 0.5\text{ }^{\circ}\text{C}$ as the standard temperature. In some specific cases, it can be recognized by the other temperature measurement, such as $20\text{ }^{\circ}\text{C} \pm 0.5\text{ }^{\circ}\text{C}$ (see Appendix B).

5.3

throughout the test, the sample cup and pressure should be maintained at a specific temperature, and should ensure that throughout the course of the experiment, the temperature the change does not exceed $0.5\text{ }^{\circ}\text{C}$.

6 Instruments

Routine laboratory equipment and glassware and the following instruments.

6.1 Pressure Cup

Comprising a hollow cylinder, a piston screw, a top lid can release the pressure with the bottom (FIG. 1 GB/T 21862.4-2008/ISO 2811-4:1997