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

GB/T 21862.2-2008

**Paints and varnishes -- Determination of density -- Part 2:
Immersed body (plummet) method**

色漆和清漆 密度的测定 第2部分：落球法

(English Translation)

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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 2 GB/T 21862 of.

This section is equivalent to using the ISO 2811-2:1997 "Paints and varnishes - Determination of density - Part 2. Falling Ball Method" (in English).

This part of ISO 2811-2:1997 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 the falling ball method Paints, varnishes and related products density method.

This section applies to low or medium viscosity adhesive material suitable for production process control.

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)

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

This method is based on Archimedes' principle. In the test, to a container placed on the balance, a certain volume of the sample is loaded, the Safety Mounted on a tripod falling ball immersed in the test sample, before and after recording falling ball submerged balance readings. Density of the sample by the falling ball before immersion After the balance reading is 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, use other identification such as temperature measurement $20\text{ }^{\circ}\text{C} \pm 0.5\text{ }^{\circ}\text{C}$ (see Appendix B).

5.3

Throughout the test, the sample and falling ball should remain at a particular temperature, and should ensure that throughout the test, the change in temperature of no more than $0.5\text{ }^{\circ}\text{C}$.

6 Instruments

Routine laboratory equipment and glassware and the following instruments.

Falling Ball 6.1

It made of corrosion-resistant metals, such as copper and zinc alloy (brass), stainless steel or aluminum, the shape shown in Figure 1. Figure 1 volume drop ball can 10mL or 100mL. Each ball drop should show its volume, standard temperature reference liquid surface tension and density of concrete GB/T 21862.2-2008/ISO 2811-2:1997