

ICS 13.300
CCS A 80



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

GB/T 21862.5-2008

**Paints and varnishes -- Determination of the density -- Part 5:
Aerometer method**

色漆和清漆 密度的测定 第5部分：比重计法

(English Translation)

Issued on: May 12, 2008

Implemented on: September 1, 2008

Issued by: Standardization Administration of China

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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 5 GB/T 21862 of.

This section is equivalent to using the NFT30-028. 1989 "Paints and varnishes - Determination of density hydrometer Law" (French version).

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).

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 hydrometer method paints, varnishes and related products density.

This section applies to the manufacture densitometry Paints, varnishes and raw materials, liquid and transparent body.

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.

NFB35-302 glass products and related equipment cylindrical test tube scale NFB35-502 glass products and related equipment test rod-precision thermometer NFB35-510 glass products and related equipment test hydrometer, construction principle and the principle of standardization NFT30-048 Paints sampling methods (paint, varnish, similar formulations and their production of raw materials) Under test conditions and test regulations NFT30-058 paint under normal circumstances Principle 3 Hydrometer is based on Archimedes law, sank when the hydrometer liquid, scheduled to open part of the liquid, and by the bottom row is equal to Open liquid weight buoyancy. Displaces liquid weight equal to its own weight when the hydrometer, is in equilibrium, then the density of the sample it can be read directly from the hydrometer.

4.1 Hydrometer

4.1.1

The following hydrometer can be used to determine the density of the liquid.

- a) M10008000900NFB35-510;
- b) M10009001000NFB35-510;
- c) M10010001100NFB35-510.

4.1.2

When the density of the liquid is outside the range of 0.8g/mL ~ 1.1g/mL, use the same precision hydrometer.

4.2 Tube

An inner diameter of at least than the outer diameter of the hydrometer 20mm, the height should allow the bottom of the bottom of the hydrometer tube kept to a minimum Distance of 25mm (see NFB35-302).

4.3 Thermometer

Accuracy should be in line with STL/0.2/15/45, NFB35-502 requirements.

5 Sample preparation

5.1

according to the provisions of NFT30-048 sampling.

The sample size should take 5.2 to meet the three tests.

Note: The sampling should avoid products containing injected into the test tube bubbles and suspended solids.