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

GB/T 9272-2007

Replacing GB/T 9272-1988

**Paints and varnishes -- Determination of percentage volume of
non-volatile matter by measuring the density of a dried coating**

色漆和清漆 通过测量干涂层密度测定涂料的不挥发物体积分数

(English Translation)

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Foreword

This revised standard adopts ISO 3233:1998 "Paints and varnishes - Determination by measuring the dry paint coating density non-volatile object points Number "(in English).

The standard in the use of international standards have been modified, these technical differences identified in a single vertical line they involved clauses margin Margin. In Appendix B gives a list of the technical differences and the reasons for the reference. ISO 3233:1998 concerning technical corrigendum Content (ISO 3233:1998/cor1.1999) has been included in this standard, these errata content with vertical double identity in which they are involved the margin of the terms page.

This standard and ISO 3233:1998 as compared to the main technical differences are.

- 5.8 by deleting the oven air flow rate to be measured air content;
- 5.9 to 5.11 with an increase of wafer paint thrown some attachments usual;
- 7.2.2 adds applicable to certain flat wafer by spin coating after painting operation;
- 7.5, Chapter 8, increased measurement method After using discs thrown paint coating operation level non-volatile mass fraction;
- Chapter 10 f) increased use should indicate whether the contents of a flat rejection of the report;
- Remove the foreword and introduction of international standards.

This standard replaces GB/T 9272-1988 "non-volatile measurement points within the liquid coating capacity." this standard and GB/T 9272-1988 main technical differences are as follows.

- Chapter 1 provisions Paints, varnishes and related products in the non-volatile fraction of objects while still obtaining a dry coating adhesion Value;
- 5.1 require the use of only a single pan balance modifications no longer use Double

balance, removing some measured with Double balance when annex;

--- Increasing the plate in 5.2, with a tip sheet, glass sheet by lacquer and other types;

--- Changed impregnated with a beaker of size 5.4, according to the size that lacquer to choose;

--- Specified in 7.2 when used in lacquer painting by increased brushing, doctor blade coating methods depending on the situation;

--- 7.2.4 with dry conditions by changing the lacquer after painting, to be selected according to the type of coating;

--- Chapter 7 procedure is subject to change, the formula in Chapter 8.

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

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee paint pigment.

This standard drafting units. China National Chemical Construction Corporation, Changzhou coating Chemical Research Institute.

1 Scope

This standard is one of the series of standards for paints, varnishes and related products for sampling and testing.

This standard specifies a method by measuring any predetermined temperature range and density of the dry or cure time of the resulting dried coating from the paints, varnishes and related products in the non-volatile object number of points determined by the method.

This method is not applicable to exceed the critical pigment volume concentration formulated paints.

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 1725-2007 Paints, varnishes and plastics - Determination of volatile matter content is not (ISO 3251:2003, IDT) GB/T 3186-2006 Paints, varnishes and raw materials for paints and varnishes - Sampling (ISO 15528:2000, IDT) GB/T 6750-2007 Paints and varnishes - Determination of density - Pycnometer method (ISO 2811-1:1997, IDT) GB/T 20777-2006

Paints and varnishes examination and preparation of samples (ISO 1513:1992, IDT) ISO 2811-2:1997 Paints and varnishes - Determination of density - Part 2. immersion body (plumb) Act ISO 2811-3:1997 Paints and varnishes - Determination of density - Part 3. Oscillation method ISO 2811-4:1997 Paints and varnishes - Determination of density - Part 4. Pressure cup method

3 Terms and Definitions

This standard uses the following terms and definitions.

Test products at a predetermined temperature, and a predetermined uniform thickness after curing or drying time specified volume of the resulting residues.

Principle 4

Will be subject to lacquer (wafer or plate) in air and water (or other suitable liquid of known density) weighed, tested products with the coating, drying in the air and then weighing the same liquid. Based on these measurements, we can calculate the dry coating mass, volume and density. By measuring liquid Mass and density of the dry coating of paint density (GB/T 6750-2007), non-volatile compounds, we can calculate the volume of non-volatile matter.

5 Apparatus and materials

Normal laboratory apparatus and the following equipment and materials.

5.1

Analytical balance, accurate to 0.1mg.

Single-plate type balance is very convenient, a useful modification is tared standard accessory shown in FIG. 1 instead of the scale pan.