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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 23981.1-2019

Paints and varnishes -- Determination of hiding power -- Part 1: Determination of contrast ratio of white and light coloured paints

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Foreword

GB/T 23981 "Determination of hiding power of paints and varnishes" is divided into the following two parts.

--- Part 1. Determination of the contrast ratio of white and light paint;

--- Part 2. Black and white grid method.

This part is the first part of GB/T 23981.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 23981-2009 "Determination of the contrast ratio of white and light paint". Compared with GB/T 23981-2009, except for editing

The main technical differences outside the series are as follows.

--- Added tristimulus value method (see Chapter 5);

--- Revised the standard range to change the tristimulus value of the light paint to a value greater than 25 (see Chapter 1, Chapter 1 of the.2009 edition);

--- Added terms and definitions (see Chapter 3);

--- The principle adds the content of the reflectivity method (see Chapter 4);

--- In the reflectivity method, the substrate is made of polyester film and black and white card paper corresponding to method A and method B (see Chapter 4);

--- The black and white card paper in the reflectivity method is specified (see 6.1.2.2, 4.4 of the.2009 edition);

--- Revised the reflectivity of the blackboard in the reflectivity method, which should be no more than 3% (see 6.1.5, 4.2 of the.2009 edition);

--- Increased processing of the substrate in the reflectivity method (see 6.3.1).

This part uses the redrafting method to modify the use of ISO 6504-3.2006 "Determination of hiding power of paints and varnishes - Part 3. light colour

Determination of the contrast ratio of paint at a fixed coating rate.

This section has more structural adjustments than ISO 6504-3.2006. This section is listed in Appendix A with ISO 6504-3.2006.

The chapter number is compared to the list.

There are technical differences in this section compared to ISO 6504-3.2006, and the terms involved in these differences have been passed on the outer margins.

The vertical single line (|) is marked, and a list of the corresponding technical differences and their causes is given in Appendix B.

This section also made the following editorial changes.

--- Modified the standard name;

--- Added informative Appendix A;

--- Added informative Appendix B;

--- Added references.

This part was proposed by the China Petroleum and Chemical Industry Federation.

This part is under the jurisdiction of the National Coatings and Pigments Standardization Technical Committee (SAC/TC5).

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1 Scope

This part of GB/T 23981 specifies the hiding power of white or light-colored paint films with tristimulus values Y greater than 25 (through contrast ratio)

Method of measurement).

The tristimulus method in this section is applicable to the paint film with a coating rate of 20 m2/L applied to black and white card stock or colorless and transparent polyester.

In the case of the film, in the latter case, the tristimulus value Y is measured by sequentially placing the lacquered polyester film on the black and white substrate.

The reflectance method in this section is applicable to the paint film of the paint applied to the black and white card paper or the colorless transparent polyester film with a fixed size applicator.

In the latter case, in the latter case, the reflectance was measured by sequentially placing the lacquered polyester film on a black and white substrate.

This section applies to the determination of the ratio of white or light paint with a tristimulus value Y greater than 25.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 1725-2007 Determination of non-volatile content of paints, varnishes and plastics (ISO 3251.2003, IDT)

GB/T 3186 Paint, varnish and paint and varnish raw materials sampling (GB/T 3186-2006, ISO 15528..2000, IDT)

GB/T 6750-2007 Determination of density of lacquers and varnishes - s. s. s.

Inspection and preparation of GB/T 20777 paint and varnish samples (GB/T 20777-2006, ISO 1513.1992, IDT)

ISO 2811-2 Determination of density of varnishes and varnishes - Part 2. immersion (drops) method [Paintsandvarnishes-De-

terminationofdensity-Part 2. Immersedbody(plummet)method]

Paints and varnishes - Determination of density - Part 3. oscillating method (Paintsandvarnishes-Determination

ofdensity-Part 3.Oscilationmethod)

Paints and varnishes - Determination of density - Part 4. Cupsandvarnishes-Determination ofdensity-Part 4.Pressurecupmethod)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Coating rate spreading rate

The surface area that can be covered by a dry paint film of the required thickness from a given amount of coating.

Note 1. The coating rate can be expressed in m2/L or m2/kg.

Note 2. See also actual coating rate and theoretical coating rate.

[GB/T 5206-2015, definition 2.238]

3.2

Actual coating rate practicalspreadingrate

The coating rate actually obtained on a particular substrate to be coated.