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CCS G55



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

**GB/T 12680-2008**

Replacing GB/T 12680.1-1990

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**Alcohol soluble dyes - Determination for general properties of  
application**

醇溶染料 一般性能的测定

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### Foreword

This standard replaces GB/T 12680.1-1990 "Determination of alcohol soluble dyes and the relative strength of the shade", GB/T 12680.2-1990 "Determination of insoluble matter content of soluble dyes in ethanol," Determination of GB/T 12680.3-1990 "soluble dyes in ethanol solubility Method ", GB/T 12680.4-1990" Determination of light fastness of alcohol soluble dyes "and GB/T 12680.5-1990" soluble dyes heat resistance Measurement method. " This standard and GB/T 12680.1-1990, GB/T 12680.2-1990, GB/T 12680.3-1990, GB/T 12680.4- 1990 and GB/T 12680.5-1990 compared to the main changes are as follows:

- 5 standard will integrate into a standard "soluble dyes general performance measurement" (the title of this edition);
- Increased the determination of ash content of soluble dyes (Chapter 8 of this edition);
- Increasing the content of the test report (Chapter 9 of this edition). The standard proposed by China Petroleum and Chemical Industry Association. This standard by the National Standardization Technical Committee Dye (SAC/TC134) centralized. This standard was drafted. State Key Laboratory of Fine Chemicals, Dalian University of Technology, Shenyang Chemical Research Institute. The main drafters of this standard. Kiran piano, Peng Xiaojun, Shen Jiong day. This standard was first released in 1990. Determination of alcohol soluble dyes of general performance

### 1 Scope

GB/T 12680-2008 is the Chinese national standard on alcohol soluble dyes - determination for general properties of application, in the field of paint and colour industries. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 15 May 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 November 2008. Classification: ICS 87.060.10, CCS G55. This page is published from the official

record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the relative intensity and shade of alcohol soluble dye in ethanol insoluble content and solubility, light resistance, heat resistance and ash test methods. This standard applies to the relative strength and shade of alcohol soluble dye in ethanol insoluble content and solubility, light resistance, heat resistance and ash Determination.

## 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 250-1995 assessing change in color like the gray card (idt ISO 105-A02.1993)

GB/T 679 chemical reagent ethanol (95%)

GB/T 684 chemical reagent toluene

GB/T 1914-2007 Chemical analysis filter paper

GB/T 1727-1992 Film General Preparation Method General conditions

GB/T 2374-2007 Determination of dyes provisions

GB/T 4841.1-2006 standard depth dyeing color card 1/1

GB/T 8426-1998 Textiles Tests for color fastness Colour fastness to light. Daylight (eqv ISO 105-B01.1994)

GB/T 8427-1998 Textiles Tests for color fastness Colour fastness to artificial light. Xenon arc (eqv ISO 105-B02.1994)

GB/T 8428-1998 Textiles Tests for color fastness light fastness. carbon arc (eqv ISO 105-B03.1994)

GB/T 12590 Chemical reagents Butanol

HG/T 3498 Chemicals Butyl acetate

## 3 Determination of alcohol soluble dyes and the relative strength of the shade

3.1 Principle The soluble dyes and standards specimens measuring its optical density of

the solution at the same time using a spectrophotometer. According to standard strength of the sample is calculated Relative intensity. Shade were visually assessed.

3.2 Reagents and materials Reagents and materials shall comply with the relevant provisions of GB/T 2374-2007 in Chapter 3. 95% (volume fraction) ethanol. chemically pure, shall comply with the provisions of GB/T 679's.

3.3 instruments and equipment Instruments and equipment shall comply with the relevant provisions of GB/T 2374-2007 in Chapter 4.

3.3.1 Analytical Balance. a sense of the amount of 0.0001g;

3.3.2 spectrophotometer;

3.3.3 colorimetric tube. 50mL.

### 3.4 Test Method

3.4.1 Determination of the relative intensity of the test solution preparation Weigh the sample and standard dye several grams (specified in the product standard), weighing accuracy of 0.0002g. They were placed in 100mL beaker