

ICS 87.040

CCS G 50



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

GB/T 41954-2022

**Paints and varnishes - On-site test methods on quality
assessment for interior wall coatings**

Issued on: December 30, 2022

Implemented on: April 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" to be drafted.

This document is modified to adopt ISO 23169.2020 "Test methods for on-site quality assessment of paints and varnishes for interior wall coatings".

Compared with ISO 23169.2020, this document has made the following structural adjustments.

--- Added 5.3.1; 5.3.2 corresponds to 5.3.1 in ISO 23169.2020, and 5.3.3 corresponds to

5.3.2 in ISO 23169.2020;

---6.2.6 corresponds to 6.2.7 in ISO 23169.2020, and 6.2.7 corresponds to 6.2.8 in ISO 23169.2020;

--- Deleted the 6.3.4.1 title in ISO 23169.2020;

---Appendix C corresponds to Appendix A in ISO 23169.2020, and Appendix D corresponds to Appendix C in ISO 23169.2020.

Compared with ISO 23169.2020, this document has more technical differences, and vertical

A single line (|) is marked. See Appendix A for a list of these technical differences and their causes.

The following editorial changes have been made to this document.

--- Deleted the note of 3.2 in ISO 23169.2020;

--- Changed the note in 3.4, changing "ISO 11998" to "ISO 11998.2006";

--- Standardize the serial number indexing method in each figure.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

A typical interior wall coating system (see Figure 1) usually consists of a thick layer of putty, 1 primer and 2 top coats. Therefore, the final interior wall coating

The quality of the paint depends on the entire coating system consisting of putty, primer and topcoat. In addition, it is also related to the construction conditions, such as coating thickness, paint-water

Dilution ratios, etc., they have a significant impact on the quality of the final coating system.

Description of index number.

1 --- Substrate (wall);

2--- putty;

4 --- Topcoat (2 coats).

Figure 1 Typical interior wall coating system

There is no standard field test method in the worldwide market to check the performance of the entire coating system. Currently, the so-called "on-site

"Test method" mainly relies on methods such as visual inspection, fingernail scratching and touching. These methods are very subjective, because even for the same wall

Different personnel may obtain different results with different topcoat systems, and these results are not repeatable. Therefore, the standard test methods provided in this document

The method is used for on-site quality assessment of wall coatings. Using these standard test methods can help distinguish between good and bad interior paint coatings.

On-site quality assessment of paints and varnishes for interior wall coatings

experiment method

1 Scope

This document specifies two field test methods for evaluating the quality of interior wall coatings [i.e. field cleanability (stain removal) test and field

Field wet scrub resistance test].

This document applies to white and light-colored coatings with tristimulus value Y10 greater than 25. The tristimulus values were obtained by coating on a black substrate

Measurements were obtained on specimens prepared from the coating.

The cleanability test is suitable for evaluating the performance of paints with a pigment volume concentration (PVC) between 18% and a critical pigment volume concentration (CPVC).

coating quality. The field wet scrub resistance test method is suitable for evaluating the coating quality of coatings with PVC concentrations close to or higher than CPVC.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

GB/T 6682-2008 Analytical Laboratory Water Specifications and Test Methods (ISO 3696.1987, MOD)

GB/T 10807-2006 Determination of hardness of flexible foam polymeric materials (indentation method) (ISO 2439.1997, IDT)

GB/T 22864 towel

GB/T 37356 Lighting conditions and methods for visual assessment of paint and varnish coatings (GB/T 37356-2019, ISO 13076.

2012, IDT)

ISO 4618 Paints and varnishes terms and definitions
(Paintsandvarnishes-Termsanddefinitions)

Note. GB/T 5206-2015 Paints and Varnishes Terms and Definitions (ISO 4618.2014, IDT)

ISO 4628-1 Evaluation of aging of paint and varnish coatings - Identification of number and size of defects and degree of uniform change in appearance

Note. GB/T 30789.1-2015 Evaluation of the aging of paint and varnish coatings The number and size of defects and the identification of the degree of uniform change in appearance

Part 1.General principles and identification system (ISO 4628-1.2003, IDT)

ISO 4628-6.2011 Evaluation of aging of paint and varnish coatings - Number and size of defects and degree of uniform change in appearance

Note. GB/T 30789.6-2015 Evaluation of the aging of paint and varnish coatings The number and size of defects and the identification of the degree of uniform change in appearance

Part 6.Determination of pulverization grade by adhesive tape method (ISO 4628-6.2011, IDT)

ISO 4628-7.2016 Evaluation of aging of paint and varnish coatings - Number and size of defects and degree of uniform change in appearance