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

GB/T 13217.2-2024

Replacing GB/T 13217.2-2009

Test method for gloss of ink

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Principle
- 6 Glossmeter Calibration

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" Drafting. This document is Part 2 of GB/T 13217. GB/T 13217 has been published in the following parts.

---GB/T 13217.1 Test method for ink color and tinting strength;

---GB/T 13217.2 Test method for gloss of ink;

---GB/T 13217.3 Test method for ink fineness;

---GB/T 13217.4 Test method for ink viscosity;

---GB/T 13217.5 Test method for ink drying;

---GB/T 13217.7 Test method for ink adhesion;

---GB/T 13217.8 Test method for anti-adhesion of liquid inks. This document replaces GB/T 13217.2-2009 "Test method for gloss of liquid inks". Compared with GB/T 13217.2-2009, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows:

--- Added gloss meter calibration (see Chapter 6);

--- Changed the preparation requirements and placement time of liquid ink prints (see 7.2.1, 7.2.2,

6.1 of the 2009 edition);

--- Added the gloss test method for paste ink (see Chapter 8). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by China Light Industry Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Inks (SAC/TC127). This document was drafted

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---First published in.1991 as GB/T 13217.2-1991, first revised in.2009;

1 Scope

GB/T 13217.2-2024 is the Chinese national standard on test method for gloss of ink, 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 March 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 October 2024. Classification: ICS 87.080, CCS Y44. 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 document describes the method for testing the gloss of inks. This document is applicable to the gloss test of paste inks and liquid inks, but not to the gloss test of inks containing metallic pigments.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 9754-2007 Paints and varnishes - Determination of specular gloss at 20°, 60° and

85° for paint films without metallic pigments

GB/T 10335.1-2017 Coated paper and paperboard Coated art printing paper (coated paper)

GB/T 13217.1-2020 Test method for ink color and tinting strength

GB/T 38153.1 Laboratory preparation of printing samples for printing technology tests Part

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Principle

The gloss of ink is measured by gloss meter. Under the irradiation of specified light source, the ratio of the reflected light of printed sample to that of standard surface is expressed as To express the gloss of the sample ink (measured with the reflected light of the standard surface as 100%).

5. Inspection conditions The test should be carried out under the conditions of temperature $(23\pm 2)^{\circ}\text{C}$ and relative humidity $(65\pm 5)\%$.

6 Glossmeter Calibration

6.1 Preparation of instruments Press the power switch of the instrument and put the "measure, hold" button in the "measure" position to preheat the instrument for 3 minutes. The instrument should be calibrated frequently at the beginning of the cycle and during the measurement process (generally, the instrument needs to be recalibrated after 10 minutes of continuous measurement) to ensure Ensure that the instrument sensitivity is within the specified range; or start and prepare according to the instrument instructions.