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

GB/T 17001.4-2025

Replacing GB/T 18753-2002

**Anti-counterfeiting printing ink - Part 4: Sunlight excitation
color variable anti-counterfeiting printing ink**

防伪油墨 第4部分：日光激发变色防伪油墨

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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" Drafting. This document is Part 4 of GB/T 17001 Anti-counterfeiting inks. GB/T 17001 has been published in the following parts.

--- Part 1: UV-excited fluorescent anti-counterfeiting ink;

2. Magnetic anti-counterfeiting ink;

3. Thermochromic anti-counterfeiting inks;

4. Sunlight-induced color-changing anti-counterfeiting inks;

5. Pressure-sensitive anti-counterfeiting inks;

6. Infrared excited fluorescent anti-counterfeiting ink;

7. Optically variable anti-counterfeiting inks;

8. Anti-tampering and anti-counterfeiting inks. This document replaces GB/T 18753-2002 "Sunlight-induced color-changing anti-counterfeiting inks". Compared with GB/T 18753-2002, except for the structural adjustment, In addition to the integration and editorial changes, the main technical changes are as follows:

a) The classification has been changed (see Chapter 4,

3.1 of the 2002 edition);

b) Deleted "Product model compilation method" (see

3.2 of the.2002 edition);

1 Scope

GB/T 17001.4-2025 is the Chinese national standard on anti-counterfeiting printing ink - part 4: sunlight excitation color variable anti-counterfeiting printing ink, in the field of environment and health protection, safety. 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 29 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 March 2026.

Classification: ICS 13.310, CCS A90. 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 provides the classification of sunlight-activated color-changing anti-counterfeiting inks and specifies the technical requirements and inspection rules for sunlight-activated color-changing anti-counterfeiting inks. And labeling, packaging, transportation, storage requirements, and describes the corresponding test methods. This document applies to various sunlight-activated color-changing anti-counterfeiting inks.

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 250-2008 Textiles-Tests for colour fastness-Grey scale for assessing change in colour

GB/T 730-2008 Textiles-Tests for colour fastness-Blue wool standard sample (1-7)-Quality control

GB/T 3186 Sampling of paints, varnishes and raw materials for paints and varnishes

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

GB/T 13217.3 Test method for ink fineness

GB/T 13217.4-2020 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 14624.3 Test method for fluidity of offset printing inks GB 17930 Motor Gasoline

GB/T 18723 Printing technology - Determination of viscosity of paste inks and binders using a viscometer

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Under direct sunlight, the appearance color of the ink can change significantly. Under no sunlight, the appearance color returns to the original color of the ink. color.

3.2 Standard sample reference sample Standard Samples used for comparison of the quality of sunlight-activated color-changing anti-counterfeiting inks (3.1) as agreed upon by both the supplier and the purchaser.

3.3 test sample Sample Samples of sunlight-activated color-changing anti-counterfeiting ink (3.1) to be tested.