

ICS 13.310
CCS A90



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

GB/T 17001.8-2024

**Anti-counterfeiting printing ink - Part 8: Altering-proof
anti-counterfeiting printing ink**

防伪油墨 第8部分：防涂改防伪油墨

Issued on: September 29, 2024

Implemented on: April 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

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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 is required. This document is part 8 of GB/T 17001 Anti-counterfeiting inks. GB/T 17001 has published the following parts. Part 1: UV-excited fluorescent anti-counterfeiting ink; Part

1 Scope

GB/T 17001.8-2024 is the Chinese national standard on anti-counterfeiting printing ink - part 8: altering-proof 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

September 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2025. 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 product classification of anti-tampering and anti-counterfeiting inks, and specifies the requirements, inspection rules, marking, packaging, etc. of anti-tampering and anti-counterfeiting inks. Packaging, transportation and storage, and the corresponding test methods are described. This document applies to the research and development, production, inspection and sales of anti-alteration and anti-counterfeiting inks used in printed materials.

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. in this document.

GB/T 250-2008 Textiles - Grey scale for colour fastness test

GB/T 730-2008 Textiles - Tests for colour fastness - Quality control of blue wool standard samples (1 to 7)

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 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 ink

GB 17930 Gasoline for vehicles

GB/T 18723 Printing technology - Determination of the viscosity of paste inks and binders by viscosity meter

GB/T 19437 Printing technology - Spectral measurement and colorimetric calculation of printed images

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 altering-proof anti-counterfeiting printing ink Ink that has been chemically altered to produce noticeable changes in the ink mark by adding special chemicals.

3.2 Reference sample Samples confirmed by both the supplier and the buyer for comparison of the quality of anti-tampering and anti-counterfeiting inks (3.1).

3.3 Test sample Samples of anti-tampering and anti-counterfeiting ink (3.1) to be tested.

3.4 Diffusible altering-proof anti-counterfeiting printing ink Ink that will show signs of dispersion (including fluorescence diffusion and fluorescence exposure) when in contact with water or correction fluids such as eraser.

7 Optically variable security inks; - Part

8. Anti-tampering and anti-counterfeiting inks. - 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 is proposed and coordinated by the National Anti-Counterfeiting Standardization Technical Committee (SAC/TC 218). This document was drafted by: Beijing Wanyang Anti-Counterfeiting Technology Co., Ltd., China National Institute of Metrology, Wuxi Xinguang Printing Anti-Counterfeiting Technology Co., Ltd. Co., Ltd., Dongxinheping Technology Co., Ltd., Beijing Boda Green High-tech Co., Ltd., Zhejiang Jingwei Printing Co., Ltd., Shandong Taibao Information Technology Group Co., Ltd., Zhongchao Guanghua Printing Co., Ltd., Zhongchao Ink Co., Ltd., Xiamen Ouhua Industrial Co., Ltd. Co., Ltd., Wenzhou Haoge Anti-counterfeiting Technology Co., Ltd., Shandong Lixin Siyuan Anti-counterfeiting Technology Co., Ltd., Bengbu Huangjinshan Gravure Printing Co., Ltd., Hangzhou Haiweite Chemical Technology Co., Ltd., Weihai Xinbeiyang Rongxin Technology Co., Ltd., China Institute of Home Furnishing (Beijing) Testing and Certification Co., Ltd. Tianjin Product Quality Supervision and Inspection Technology Research Institute, Shanghai Anti-Counterfeiting Technology Product Evaluation Center, Beijing Technology and Business University, Shenzhen Momo YINGLIAN TECHNOLOGY CO., LTD. The main drafters of this document are. Huang Tiexiang, Fan Guanbao, Wang Guoping, Lou Shuiyong, Zhang Bin, Wang Jianguang, Lü Gongbin, Wang Lu, Wang Changzheng, Chen Yunsheng, Zhang Xianzang, Yu Chi, Zhang Jianping, Xu Shaohong, Wang Guoqiang, Xin Xiulan, Qi Xin, Sun Xiaoyan, Gao Yue, Deng Xiangrui, Yuan Zijin, Sun Mingzhu and Liu Rong.

As a base material for anti-counterfeiting products, anti-counterfeiting ink is widely used in national securities, certificates, ordinary printed materials and product packaging. The formulation of this series of national standards can further regulate the production, use and testing of anti-counterfeiting inks, and is of great significance to the maintenance of It is of

great significance to national security, social and financial security, product supervision and management, and improving product quality. This series of standards is mainly based on anti-counterfeiting. The inks are classified based on their manufacturing process and anti-counterfeiting features. GB/T 17001 "Anti-counterfeiting Inks" is planned to consist of 9 parts. Part 1: UV-excited fluorescent anti-counterfeiting inks. The purpose is to provide the requirements and test methods for UV-excited fluorescent anti-counterfeiting inks. Part

2. Magnetic anti-counterfeiting ink. The purpose is to give the requirements and test methods for magnetic anti-counterfeiting ink. Part

3. Thermochromic anti-counterfeiting inks. The purpose is to provide the anti-counterfeiting characteristics and grading methods of thermochromic anti-counterfeiting inks. Part

4. Sunlight-induced color-changing anti-counterfeiting inks. The purpose is to provide the requirements and test methods for sunlight-induced color-changing anti-counterfeiting inks. Part

5. Pressure-sensitive anti-counterfeiting inks. The purpose is to give the requirements and test methods for pressure-sensitive anti-counterfeiting inks. Part

6. Infrared excited fluorescent anti-counterfeiting ink. The purpose is to provide the requirements and test methods for infrared excited fluorescent anti-counterfeiting ink. Part

7. Optically variable anti-counterfeiting inks. The purpose is to provide the technical requirements and test methods of optically variable anti-counterfeiting inks. Part

8. Anti-tampering and anti-counterfeiting inks. The purpose is to provide the requirements and test methods for anti-tampering and anti-counterfeiting inks. Part

9. Other anti-counterfeiting inks. The purpose is to provide the definition, requirements and other requirements of other anti-counterfeiting inks other than Parts 1 to 8. Summation test method. This document aims to standardize the production, application and inspection of anti-tampering and anti-counterfeiting inks so that anti-tampering and anti-counterfeiting inks can better play their anti-counterfeiting effect. To ensure the stability and controllability of its quality, it is necessary to protect the legitimate rights and interests of manufacturers, users and consumers, and safeguard the country's Security and stability are of great importance. Anti-counterfeiting ink Part