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

GB/T 42946-2023

**Requirements for stability for general graphic applications
paper**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is modified to adopt ISO 20494.2017 "Stability Requirements for General Image Printing Paper".

Compared with ISO 20494.2017, this document has many structural adjustments. A list of structure number comparisons between the two files is attached.

Record A.

The technical differences between this document and ISO 20494.2017 and their reasons are as follows.

---Deleted the filler paper in the scope (see Chapter 1), which does not comply with the terminology of my country's industry standards;

---Replaced ISO 186 (see 6.1) with normative reference GB/T 450; replaced with normative reference GB/T 451.2

ISO 536 (see 6.3); replaced ISO 1974 (see 6.4 and 6.5) with normative reference GB/T 455; with normative reference

GB/T 1545-2008 replaced ISO 6588-1 (see 6.7); replaced by normative reference GB/T 10739

ISO 187 (see 6.2); replaced ISO 5630-3 (see 6.5) with normatively cited GB/T 22894;

GB/T 24998 replaces ISO 10716 (see 6.6) to adapt to my country's technical conditions;

---Change the term "ordinary image application" to "ordinary image printing paper" (see 3.2) to adapt to the reading habits of our country's industry;

---Change the content of Note 2 of 6.3 in ISO 20494.2017 to the requirements in the main

text (see 5.3) to adapt to my country's technical conditions;

---Changed the expression of test conditions (see 6.2) to adapt to my country's technical conditions;

---Added the tear retention rate calculation formula (see 6.5) to make the standard content easy to operate.

The following editorial changes have been made to this document.

---In order to coordinate with the existing standards, the name of the standard is changed to "Stability Requirements for Ordinary Image Printing Paper";

---Deleted Note 1 in Chapter 1 of ISO 20494:2017 and Note 1 in 6.3;

---Deleted Appendix A (Informative) "Precision" and Appendix B (Informative) "Accelerated Aging on Optical Performance" in ISO 20494:2017

"Influence", Appendix C (informative) "About paper durability, archival paper durability and durability, and ordinary image printing paper stability

"International Standard", Appendix D (Informative) "Accelerated Aging Test" and Appendix E (Informative) "Conformity Statement";

---Added informative appendix A.

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the stability requirements for general image printing papers and describes test methods.

This document applies to the production, inspection and sales of various types of coated and uncoated printing papers.

2 Normative reference documents

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

For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to

this document.

GB/T 450 Collection of paper and cardboard samples and determination of longitudinal, transverse, front and back sides of the sample (GB/T 450-2008, ISO 186.

2002,MOD)

GB/T 451.2 Determination of basis weight of paper and paperboard (GB/T 451.2-2002, eqvISO 536.1995)

GB/T 455 Determination of tear strength of paper and cardboard (GB/T 455-2002, eqvISO 1974.1990)

GB/T 1545-2008 Determination of acidity or alkalinity of aqueous extracts of paper, cardboard and pulp (ISO 6588.1981, MOD)

GB/T 10739 Standard atmospheric conditions for handling and testing of paper, paperboard and pulp samples (GB/T 10739-2002, eqvISO 187.

1990)

GB/T 22894 Moist heat treatment for accelerated aging of paper and paperboard at 80°C and 65% relative humidity (GB/T 22894-

2008,ISO 5630-3.1996,MOD)

GB/T 24998 Determination of alkali reserves of paper and paperboard (GB/T 24998-2010, ISO 10716.1994, MOD)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

paperstabilitypaperstability

Under normal conditions of use and storage, the paper retains its ability to perform ordinary image printing functions.

Note. The stability of this document is different from the paper stability required for documents permanently stored (such as in libraries, archives and other protected places).

3.2

All graphic paper used for printing or writing that is not permanently retained.

Note. Typical products for general image printing paper include newspapers, magazines, brochures, books, office printing paper and copy paper.

3.3

Alkalireserve alkalireserve

A class of alkaline compounds (such as calcium carbonate) in paper and cardboard that can neutralize acidic substances generated due to natural aging or atmospheric pollution.

amount.

[Source. GB/T 4687-2007, 4.5, with modifications]

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