



National Environmental Protection Standards of  
the People's Republic of China

HJ 410-2017

Replace HJ/T 410-2007

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**Technical requirement for environmental labeling products**

**Culture paper**

Issued on December 11, 2017

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**Issued by the Ministry of Environmental Protection**

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**This document is a translation of a Chinese original. In case of dispute, the original document should be taken as authoritative.**

## Foreword

This standard is formulated for the purposes of implementing the Environment Protection Law of the People's Republic of China, reducing adverse impacts of raw materials, production and use process of culture paper on the environment and human health, and protecting the environment.

This standard establishes environmental protection requirements for the production process as well as the lightness and limits of toxic and harmful substances in culture paper products.

This standards revises the Technical Requirement for Environmental Labeling Products—Copy Paper (HJ/T 410-2007) with the following major amendments:

- Adjust the standard name and scope of application;
- Adjust the requirements for pollutant discharge;
- Add the requirements for cleaner production;
- Adjust the requirements for raw material sources;
- Increase the requirement for restricted additive substances in raw materials;
- Adjust the requirements for water intake in production process;
- Add the requirements for energy consumption and restricted additive substances in production process;
- Increase the requirements for restricted substances in products;
- Revise the requirements for product brightness.

This development of this standard is under the organization of the Department of Science, Technology and Standards of the Ministry of Environmental Protection of China.

The main organizations drafting this standard are the Environmental Development Center of the Ministry of Environmental Protection and National Paper Product Quality Supervision and Inspection Center.

This standard was approved by the Ministry of Environmental Protection of China on December 11, 2017.

This standard takes effect as of March 1, 2018.

This standard shall be interpreted by the Ministry of Environmental Protection of China.

The previous version replaced by this standard is HJ/T 410-2007.

# Technical requirement for environmental labeling products

## Culture Paper

### 1 Applicable Scope

This standard stipulates the terms and definitions, basic requirements, technical contents and test methods for culture paper environmental labeling products.

This standard is applicable to cultural paper products such as newsprint, offset printing paper, offset book paper, dictionary paper, copy paper, light printing paper, writing paper, coated art printing paper (coated paper), light coated paper, thermal paper and carbonless copy paper.

### 2 Normative References

The contents of this standard quote the provisions of the following documents. The valid version of any quoted document without a marked date shall be applicable to this standard.

GB 31825 The Norm of Energy Consumption Per Unit Product of Pulp and Paper

GB 31604.49 National Food Safety Standard —Food Contact Materials and Articles – Determination of Arsenic, Cadmium, Chromium and Lead; Determination of the Migration Volume of Arsenic, Cadmium, Chromium, Nickel, Lead, Antimony and Zinc

GB/T 7974 Paper, Board and Pulps — Measurement of Diffuse Blue Reflectance Factor— D65 Brightness (Diff/Geometry, Outdoor Daylight Conditions)

GB/T 18916.5 Norm of Water Intake — Part 5: Pulp, Paper and Paper Board Production

GB/T 22804 Pulp, Paper and Board— Determination of Mercury Content

GB/T 22904 Pulp, Paper and Board— Determination of Total Chlorine and Organically Bound Chlorine

GB/T 28951 Forest Certification in China—Forest Management

GB/T 28952 Forest Certification in China—Chain of Custody

GB/T 34455 Paper, Board and Pulp — Determination of 2,2-bis (4-hydroxyphenyl) Propane (bisphenol A) — Liquid Chromatography

Clean Product Evaluation Index System for Pulp and Paper Industry (NDRC, MEP and TENAA Announcement 2015 No.9)

### 3 Terms and Definitions

The following term and definition shall apply to this standard.

Culture paper

It refers to the general name of various printing or writing paper for the purpose of cultural inheritance and information dissemination.

### 4 Basic Requirements

4.1 The product quality shall be in compliance with relevant requirements of national and sector standards.

4.2 Pollutant emissions of product manufacturers shall meet national or local emission standards.

4.3 Product manufacturers shall reach Level II specified in Clean Product Evaluation Index System for Pulp and Paper Industry.

### 5 Technical Contents

5.1 Requirements for raw materials

5.1.1 Pulp or wood shall meet the requirements of GB/T 28951 and GB/T 28952. The imported pulp or wood shall meet relevant national trade requirements for import and export of wood.

5.1.2 Chlorine and hypochlorite shall not be used as bleaching agent.

5.1.3 Alkylphenol ethoxylates (APEOs) and ethylenediamine tetraacetic acid (EDTA) shall not be used.

5.2 Requirements for production process

5.2.1 The water intake amount of cultural paper products (including self-made pulp) shall be no more than 50% of the corresponding category requirements for the newly-established paper making enterprises specified in GB/T 18916.5. Other cultural paper such as thermal paper and carbonless copy paper shall refer to the requirements of printed writing paper.

5.2.2 The energy consumption of cultural paper products (including self-made pulp) shall reach 90% of the leading indicator requirements of the corresponding category specified in GB 31285. Other cultural paper such as thermal paper and carbonless copy paper shall refer to the requirements of coated printing paper.

5.3 Product requirements

5.3.1 Thermal paper shall not contain bisphenol A (BPA).

5.3.2 Limits of hazardous substances in culture paper products shall meet the requirements of Table 1.

**Table 1 Limits of hazardous substances in culture paper products**

Item	Limit
Organochlorine, mg/kg $\leq$	150
Total heavy metal (lead, mercury, chromium, cadmium), mg/kg $\leq$	100
Lead, mg/kg $\leq$	90
Mercury, mg/kg $\leq$	60
Chromium, mg/kg $\leq$	60
Cadmium, mg/kg $\leq$	75

5.3.3 Limits of the product D65 brightness shall meet the requirements of Table 2.

**Table 2 Limits of D65 brightness of culture paper products**

Category	D65 brightness, % $\leq$	
	General product	Paper for groups 0-17 years old
Newsprint	53.0	--
Copy paper	90.0	--
Offset printing paper	90.0	85.0
Offset book paper	85.0	80.0
Light printing paper	85.0	80.0
Dictionary paper	85.0	80.0
Writing paper	82.0	80.0
coated art printing paper (coated paper)	93.0	90.0
Light coated paper	90.0	88.0
Thermal paper	90.0	--
Carbonless copy paper	90.0	--
Others	80.0	--

## 6 Test Methods

6.1 The test of bisphenol A in Technical Content 5.3.1 shall be conducted based on the methods specified in

GB/T 34455.

6.2 The test of organic chloride in Technical Content 5.3.2 shall be conducted based on the methods specified in GB/T 22904-2008.

6.3 The test of lead in Technical Content 5.3.2 shall be conducted based on the methods specified in Part I of GB 31604.49-2016.

6.4 The test of mercury in Technical Content 5.3.2 shall be conducted based on the methods specified in GB/T 22804-2008.

6.5 The test of chromium in Technical Content 5.3.2 shall be conducted based on the methods specified in Part I of GB 31604.49-2016.

6.6 The test of cadmium in Technical Content 5.3.2 shall be conducted based on the methods specified in Part I of GB 31604.49-2016.

6.7 The test of D65 lightness in Technical Content 5.3.3 shall be conducted based on the methods specified in GB/T 7974.

6.8 Other requirements in Technical Contents shall be verified by document review combined with site inspection.

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