

ICS 85.060

CCS Y 32



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

GB/T 20810-2018

Replacing GB 20810-2006

Toilet tissue paper (including toilet tissue base paper)

卫生纸 (含卫生纸原纸)

Issued on: June 7, 2018

Implemented on: July 1, 2019

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

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Classification
- 5 Requirements
- 6 Test methods
- 6.18 Deviation
- 7 Inspection rules
- 8 Marks, packaging, transport and storage
- 8.1 Sales marks and packaging
- 8.2 Transport and storage

1 Scope

China's national product standard for toilet tissue and for the base paper it is made from. It specifies the terms and definitions, the classification, the requirements, the test methods, the inspection rules, and the marking, packaging, transport and storage, and it applies to toilet tissue used in daily life and to the base paper supplied to converters. Tissue is an unusual paper because almost every property that matters is the opposite of what a printing or packaging paper needs. It has to be weak enough to tear where the perforation is and to break up in water so that a drain does not block, and strong enough not to fail in the hand while wet. It has to be soft, which is a sensory property produced by low fibre bonding, crepe and the absence of hard fibre - and low bonding is exactly what makes paper weak, so the whole product is a controlled compromise. And it is a hygiene product in direct contact with skin, made increasingly from recovered fibre. The standard therefore covers three groups of requirements at once. The physical ones: grammage, dry and wet tensile strength, softness, water absorption capacity and rate, hole count and dust. The appearance and dimensional ones, including the tolerance on sheet size and count, which is what stops a roll being sold short. And the hygiene ones, which is where a tissue standard differs from any other paper standard: the microbiological limits, the fluorescent whitening agent, and the limits on the substances that recovered fibre can carry through. The inclusion of base paper in the same document matters commercially, since most tissue is converted by a company that did not make the paper. Issued on 7 June 2018 and in force since 1 July 2019, it replaces GB 20810-2006.

This Standard specifies terms and definitions, classification, requirements, test methods,

inspection rules, marks, packaging, transport and storage for toilet tissue paper (including toilet tissue base paper). This Standard is applicable to toilet tissue paper used in daily life and toilet tissue base paper used for processing toilet tissue paper sold externally.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 450, Paper and board - Sampling for testing

GB/T 451.1, Paper and board - Determination of size and deviation

GB/T 461.1, Paper and board - Determination of capillary rise (Klemm method)

GB/T 462, Paper and board - Determination of moisture content

GB/T 742, Fibrous raw material, pulp, paper and board - Determination of ash

GB/T 1541, Paper and board - Determination of dirt

GB/T 2828.1, Sampling procedures for inspection by attributea-Part1. Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 toilet tissue (base) paper made from virgin fiber toilet tissue paper and toilet tissue base paper that the fiber raw material is 100% virgin pulp (fiber)

3.3 toilet tissue (base) paper made from virgin non-wood fiber toilet tissue paper and toilet tissue base paper that the fiber raw material is 100% virgin non-wood pulp (fiber)

3.4 toilet tissue (base) paper made from virgin wood fiber and virgin non- wood fiber

3.5 toilet tissue (base) paper made from recycled fiber toilet tissue paper and toilet tissue base paper that fiber raw materials contain recycled pulp (fiber)

4 Classification

4.1 Toilet tissue paper and toilet tissue base paper, according to fiber raw materials, are classified into two categories.

4.2 Toilet tissue paper, according to package style, is classified into roll toilet tissue paper, disc type toilet tissue paper, flat-cut toilet tissue paper and tissue toilet tissue paper.

4.3 Toilet tissue paper and toilet tissue base paper, according to number of layers, are

classified into single-layer, double-layer or multiple-layer.

5 Requirements

5.1 Technical indicators of toilet tissue (base) paper made from virgin fiber shall comply with Table 1.

5.2 Technical indicators of toilet tissue (base) paper made from recycled fiber shall comply with Table 2.

5.3 Microbiological indicators of toilet tissue paper and toilet tissue base paper shall comply with Table 3.

5.4 The roll width of toilet tissue base paper, the width of roll toilet tissue paper and disc type toilet tissue paper, the length and width of flat-cut toilet tissue paper, tissue toilet tissue paper, shall meet the contract or indicated requirements.

5.5 The roll weight of toilet tissue base paper, the roll weight (or number of sections) of roll toilet tissue paper and disc type toilet tissue paper, the packaging mass (or number of sheets) of flat-cut toilet tissue paper, number of tissues of tissue toilet tissue paper, shall meet the contract or indicated requirements.

5.6 The toilet tissue paper shall be punched evenly. It is easy to tear between sections.

5.7 Toilet tissue paper can be embossed, printed or dyed. The color of the same batch of products shall be basically the same. Dyed toilet tissue paper shall not decolor easily.

6 Test methods

6.1 Specimen extraction and processing Specimen extraction is in accordance with GB/T 450. During quantification, D65 brightness, horizontal liquid absorption height, tensile index, softness, spherical burst resistance, holes, skewness, deviation measurement,

6.2 Quantification Quantification is determined according to GB/T 24328.5. Display the measurement results in single layer.

6.3 D65 brightness D65 brightness is measured according to GB/T 7974.

6.6 Softness Softness is measured according to GB/T 8942. Slit width is 5mm. Specimen size is 100mmx100mm.

6.7 Migrating fluorescent substance Place the specimen under the UV lamp. Under UV light with wavelengths of 254nm and 365nm, check if there is fluorescence.

6.8 Ash content Ash content is determined according to GB/T 742. Burning temperature is 575°C.

6.12 Dustiness Dustiness is determined according to GB/T 1541. For double-layer or

multiple- layer specimen, only measure the outer side of the upper surface. The test area of each sample (the total area of the upper and lower layers) shall not be less than 0.5m

2.Measure both front and back sides of single layer specimen.

6.18 Deviation

6.19 Appearance quality Visually inspect the appearance quality. For the detection of toilet tissue paper defects, breakages, hard blocks, raw grass tendons, pulp masses and other paper defects and foreign matter as well as other appearance paper defects, it shall choose any whole roll (disc, package). Open completely. Visually inspect it.

7 Inspection rules

7.1 The manufacturer shall ensure that the toilet tissue paper and toilet tissue base paper produced comply with this Standard or contract. The products of the same raw material and the same specification, with one delivery quantity, are one batch. Each batch of products shall be accompanied by a product qualification certificate.

7.2 If the microbiological indicators or raw materials of a batch of toilet tissue paper and toilet tissue base paper are nonconforming, the batch is determined to be unacceptable.

7.3 Sampling inspection procedures by attributes shall be carried out in accordance with GB/T 2828.1.The unit for toilet tissue paper sample and toilet tissue base paper sample is piece.

7.4 Determination of acceptability. The number of samples for the first inspection shall be equal to the first sample size given in the plan.

7.5 If the purchaser has objections to the quality of the product, it can notify the supplier for a joint re-inspection within three months after the arrival of the goods or entrust a mutually agreed inspection department to conduct the re- inspection.

8.1 Sales marks and packaging

8.1.1 The following content shall be marked on the sales package of the product.

8.1.2 The sales packaging of the product shall ensure that the product is not contaminated. The various signs and information on the sales package shall be clear and not easy to fade. About Chinese characters, numbers and letters used in product marks, the font height should not be less than 1.8mm.