

QB

**LIGHT INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

QB/T 2493-2000

**Disposable Diaper (Including Diapers/Pads)
(English Translation)**

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1 Scope

This Standard stipulates the classification, technical requirements, test methods, inspection rules, marking, packaging, transportation and storage of disposable diapers and diapers/pads for infants and adults.

This Standard is applicable to structures with exclusive design, in other words, disposable diapers, and diapers/pads which are constituted of external cladding materials, built-in absorption layer and leakproof base film, and molded through exclusive packing machine; diapers/pads which are constituted of external cladding materials, built-in absorption layer and leakproof base film, and molded through non-exclusive packing machine.

2 Normative References

Through the reference in this Standard, clauses included in the following standards become clauses of this Standard. When this Standard is published, the indicated versions shall all be valid. All the standards will be amended, all parties adopting this

Standard shall explore the possibility of using the latest version of the following standards.

GB/T 2677.2-1993 Fibrous Raw Material - Determination of Moisture Content

GB/T 2828-1987 Sampling Procedures and Tables for Lot-by-lot Inspection by
Attributes (apply to inspection of successive lots or batches)

GB/T 10739-1989 Paper, Board and Pulps - Conditioning of Samples and Testing

Atmospheres

GB 15979-1995 Hygienic Standard for Disposable Sanitary Products

3 Product Classification**3.1**

In accordance with product structure, this Standard shall be divided into disposable diapers for infants, disposable diapers for adults, diapers/pads for infants, diapers/pads for adults. In accordance with specification, this Standard shall be divided into several different sizes, namely, Size-S, Size-M and Size-L.

3.2

Disposable diapers and diapers/pads shall be divided into three grades, namely, superior grade, first grade and qualified grade.

percentage of the average value in the 6 PCS as the measured result of full-width deviation of this specification of samples, accurate to 1%.

NOTE: in terms of samples with elastic band, firstly, use a splint or adhesive tape to fixate the longitudinal (or transversal) side of the sample; slightly exert strength to pull the sample to the original length (or original width), then, use a straight ruler to measure it.

5.2.3 Deviation of strip mass

Use a balance (division value: 0.01 g) to respectively weigh the net weight (accurate to 0.1 g) of 6 PCS of samples of the same specification. Respectively calculate the maximum value and the minimum value of strip mass, the difference of average value and the percentage of the average value in the 6 PCS as the measured result of strip mass deviation of this specification of samples, accurate to 1%.

5.2.4 Calculation of full length, full width and strip mass deviation

x 100 (1)

x 100 (2)

5.3 Permeability shall be determined in accordance with Appendix A (appendix of this Standard).

5.4 pH shall be determined in accordance with Appendix B (appendix of this Standard).

5.5 Delivery moisture shall be determined in accordance with GB/T 2677.2. Sampling method shall be: randomly take 2 PCS of samples from the same specification; cut off the elastic band on the edges of the samples, then, randomly take 2 g (accurate to

0.01 g) from each PCS for the determination; take the arithmetic mean value as the result of determination (matters needing attention: when samples are placed into a container, the

leakproof base film shall not be close to container wall, which could prevent adhesion at a high temperature).

6.1 Acceptance Inspection

6.1.1

One delivery of the same type of products shall be considered as one batch. The unit of samples for acceptance inspection shall be per box. Randomly take a sufficient sampling size from the sample box as the samples of the box.

6.1.2

Manufacturers shall guarantee that product quality complies with the requirements of this Standard. When products pass the inspection and are attached with the stipulations in this Standard or ordering contract, then, the objection shall be handled by the supply-side.

6.2 Type Inspection

Under one of the following circumstances, type inspection shall be conducted,

Inspection items are all the technical requirements of this Standard.

- a) In the finalization appraisal of trial production of new and old products being transferred to another factory for production;
- b) In production, when production process is modified, or when new raw materials are put into production, which might affect product performance;
- c) In normal production, type inspection shall be conducted in each quarter;
- d) When production is suspended for over 2 months, and then, resumed;
- e) When the exit-factory inspection result shows significant difference from the previous type inspection.

7.1 Sales Marking and Packaging of Products

7.1.1

On the sales package, the following content shall be indicated:

- a) Product name, serial No. of implemented standard, serial No. of implemented hygienic standard, hygienic license No., trademark;
- b) Name and address of manufacturer;
- c) Product variety, product quantity and product grade;
- d) Date of production or batch No.;
- e) Disinfecting products shall also indicate disinfection method and time of validity;

on the main surface of the package, the words "disinfection grade" shall also be indicated.

7.1.2

Products' sales package shall be able to prevent products from being contaminated. Moisture-proof and seepage-proof materials with satisfying isolation performance and sealing performance, for example, polyethylene film, shall be selected, so as to guarantee that marking information can be distinctly printed and will not easily fade.

7.2 Transportation and Storage of Products

Appendix A (Normative)

Determination of Permeability

A.1.1 Instruments

A.1.1.1 Balance: division value: 0.01 g, 1 set.

A.1.1.2 Sanitary pad permeability tester (hereinafter referred to as "tester"; please refer

to Figure A.1 for its sketch map), 1 set.

A.1.1.3 Standard discharge funnel (hereinafter referred to as "funnel")

---Exclusive standard discharge funnel for disposable diapers, diapers/pads for infants: 80 mL, 1 PCS.

---Exclusive standard discharge funnel for disposable diapers, diapers/pads for adults: 150 mL, 1 PCS.

A.1.1.4 Measuring cylinder: 250 mL, 1 PCS.

A.1.1.5 Measuring cylinder: 10 mL, 1 PCS.

A.1.1.6 Stainless-steel clip: chuck width: around 65 mm, 4 PCS.

A.1.1.7 Beaker: 500 mL, 1 PCS.

A.1.1.8 Medium-speed chemical qualitative analysis filter paper (GB/T 1914): several

PCS, hereinafter referred to as "filter paper".

A.1.1.9 Standard clamp plate, Phi 100 mm, weight: (1.2 ± 0.002) kg (capable of generating 1.5 kPa of pressure).

A.1.1.10 Stopwatch: accuracy: 0.01 s, 1 PCS.