

ICS 61.060

QB

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

QB/T 4331-2021

**Children athletic shoes
(English Translation)**

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1 Scope

This document specifies the requirements, after-sales quality judgment, judgment, inspection rules and marking, packaging, transportation, storage of children's athletic shoes; describes the corresponding test methods, defines the relevant terms and definitions; gives product classifications.

This document applies to the production, inspection, sales of children's athletic shoes and infant's athletic shoes for general wear.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in the text. For references with dates, only the versions corresponding to the dates apply to this document; for references without dates, the latest versions (including all amendments) apply to this document.

GB/T 251 Textiles - Tests for color fastness - Grey scale for assessing staining

GB/T 2703 Footwear - Vocabulary

GB/T 3903.1 Footwear - Test methods for whole shoe - Flexing resistance

GB/T 3903.2 Footwear - Test methods for whole shoe - Abrasion resistance

GB/T 3903.3 Footwear - General test methods - Peeling strength

GB/T 3903.4 Footwear - Test methods for whole shoe - Hardness

GB/T 3903.5 Footwear - General test methods - Appearance quality

GB/T 3903.20 Footwear - Test methods for accessories: Touch and close fasteners -

- Peel strength before and after repeated closing

GB/T 3903.21 Footwear - Test methods for accessories: Touch and close fasteners -

- Shear strength before and after repeated closing

GB/T 21396 Footwear - Test methods for whole shoe - Upper sole adhesion

QB/T 1187 Footwear - Principle of inspection and marking, package, transportation, storage

QB/T 2224 Footwear - Performance requirement for uppers low-temperature flexing resistance

QB/T 2673 Labeling for footwear product

QB/T 2882-2007 Footwear - Test methods for uppers, linings and insoles - Color fastness to rubbing

3 Terms and definitions

The terms and definitions as defined in GB/T 2703, as well as the following terms and definitions, apply to this document.

3.1

Infants' athletic shoes

Athletic shoes which have a size not more than 170 and is generally suitable for infants and young children aged 3 years and below.

3.2

Children's athletic shoes

Athletic shoes which have a size greater than 170 and is generally suitable for children aged 3 years and above to 14 years old.

3.3

Primary parts

Generally, it is the outer side and front part of the upper surface.

[Source: GB/T 2703-2017, 2.3.21]

3.4

Subsidiary parts

Generally, it is the inner side and rear part of the upper.

[Source: GB/T 2703-2017, 2.3.2, modified]

5.3.2 Folding resistance of finished shoes

5.3.2.1

Folding resistance of finished shoes shall not be measured, if any of the following conditions occur:

- a) The shoe size is less than 230;
- b) The thickness of the flexion part of the sole (including the pattern) is greater than 25 mm.

Note: The thickness of the flexion part of the sole includes the thickness of the insole, but does not include the thickness of the bottom wall part higher than the insole.

5.3.2.2

The requirements for the folding resistance of finished shoes are shown in Table 2.

5.3.3 Outsole wear resistance

5.3.3.1

Infants' athletic shoes are not tested for wear resistance.

5.3.3.2

The length of the wear mark shall not be greater than 14.0 mm.

5.3.4 Low-temperature flexural performance of the upper surface material

5.3.4.1

Infant's athletic shoes are not tested for low-temperature flexural performance of the upper surface material.

5.3.4.2 The low-temperature flexural performance of the upper material of shoes worn

in nominal low-temperature environments (such as winter or warm shoes, etc.) shall comply with the requirements of QB/T 2224.

5.3.5 Friction color fastness of lining and insole

The staining shall not be less than level 2-3; the gray scale shall comply with the provisions of GB/T 251.

5.3.6 Outsole hardness

5.3.6.1

The outsole hardness of infant's athletic shoes is not measured.

5.3.6.2

The outsole hardness of solid material shall not be less than 40 Shore A; the

It is tested according to GB/T 3903.2; the wear time is 20 minutes continuously. When testing the wear resistance of the foam material outsole, the surface dense layer is not polished. If the flat area does not meet the test requirements, this item is not performed.

7.5 Low temperature flexing performance of upper material

It is tested according to the provisions of QB/T 2224. If sampling is not possible, materials from the same batch can be tested.

7.6 Friction color fastness of lining and insole

7.6.1

Take lining and insole materials as specimens. If there is no lining, the contact surface between the upper and the foot is tested as the lining. If sampling is not possible, materials from the same batch can be tested.

7.6.2

It is tested according to method A in QB/T 2882-2007, to carry out 50 wet rubs for testing. The test results are evaluated according to the gray scale of GB/T 251 for staining grade.

7.7 Outsole hardness

It is tested according to the provisions of GB/T 3903.4. When testing the hardness of the outsole of the foam material, do not polish the surface dense layer; the outsole can be tested at any part of the forefoot or heel if it is a single material; the composite sole is tested at the stress point; the patch material shall be tested together with the whole shoe. Different materials at the stress point shall be tested separately and the results expressed.