

QB

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

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**Kitchen knives
(English Translation)**

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1 Subject content and scope of application

This standard specifies the product classification, technical requirements, test methods, inspection rules and markings, packaging, transportation, storage of kitchen knives.

This standard applies to kitchen knives.

2 Normative references

GB 2828 Sampling procedures and tables for lot-by-lot inspection by attributes (Apply to inspection of successive lots or batches) GB 2829 Sampling procedures and tables for periodic inspection by attributes (Apply to inspection of stability for productive process)

3 Classification of products

3.1

The product type is determined, according to the situation of the respective enterprise or local characteristics, as well as special requirements.

3.2

The names of the main parts of the product are as shown in the Figure.

3.3

The specifications of the product are divided into 1* ~ 8*, category A and B, according to the length of the blade (the longest part). The specifications and dimensions are as shown in Table 1.

Knife edge Knife head Knife back Trademark Knife hoop Knife handle Knife tail Washer

Knife root Blade length is acicular tempered martensite + fine needle tempered martensite + granular carbide + a small amount of residual austenite (bainite is allowed).

4.4 Partial steel is not allowed on the blade of composite steel kitchen knife.

The width of apparent steel is not less than 0.5 mm. There must be no defects, such as over-burning, fracture, dust inclusion, etc.

4.5 Roughness

4.5.1

If the main body of the blade is carbon steel, its roughness is $Ra \leq 3.2 \mu m$.

4.5.2

If the main body of the blade is stainless steel, its roughness is $Ra \leq 1.6 \mu m$.

4.6 The blade is straight and symmetrical, except for special design requirements.

4.7 The cumulative length of polished coarse wire and black wire, which is less than 10 mm, on the knife body, shall not exceed 50 mm. The number of pits, which is less than 1 mm², shall not exceed 5.

4.8.1 There is no looseness or deformation, after the end of the knife handle

bears a radial tension of 80 N. Knife hoop and washers shall be assembled tightly, firm, straight.

4.8.2 There shall be no pores or sand holes in the welding place, between the metal handle and the knife body; there is no water leakage; the welding shall be flat and smooth.

4.8.3 There is no looseness or deformation of the plastic knife handle, after the temperature resistance test.

4.9 The trademark shall be clear and upright.

4.10 See Appendix A (Supplementary) for the quality grading requirements of kitchen knives.

5 Test method

5.1

Product specifications are tested by universal measuring tools.

5.2 Sharpness. Use a kitchen knife sharpness tester to test; measure one point

at each of the front and rear 1/3 of the blade.

5.3 Hardness test. Use a hardness tester, to measure one point, each at the front, middle,

back within 5 ~ 8 mm from the cutting edge line.

5.4 The metallographic organization is examined by a metallographic microscope (500X). The observation position is on the middle cross section of the blade length, 3 ~ 10 mm away from the cutting edge.

5.5 Quenching width and apparent steel and partial steel test. Coat 5% nitric

acid solution on the cutting edge of the knife head and root, respectively, to observe the color; measure it visually and with a ruler.

5.6 Roughness test. Use a roughness tester OR compare with roughness

samples. Use instrument measurement as the arbitration method.

5.7 Thick wire, black wire, pitting is measured by template or ruler.

5.8 Knife handle's strength test. Use the knife hoop as the fulcrum and the back

as the bottom surface. Use the hanging weight method, at 10 mm on the tail end of the knife handle.

5.9 Temperature resistance test of plastic knife handle. The plastic knife handle

is immersed in water at 100 °C for 15 minutes.

5.10 For other technical requirements, use visual inspection and hand feel inspection.

6 Inspection rules

6.1

The product can leave the factory, only after it has passed the inspection by the quality inspection department of the manufacturer, according to this standard.

6.2

The products are divided into exit-factory inspection and type inspection.

6.2.1 Exit-factory inspection

It is performed according to the provisions of GB 2828. Use one sampling plan of normal inspection. Carry out calculation based on the number of unqualified products per 100 units. The inspection items, nonconformance classification, inspection level, acceptance quality level shall meet the requirements of Table 4.

factory inspection. It is first re-inspected, according to the exit-factory inspection items. After the re-inspection is qualified, carry out the type inspection.

6.3 If it fails in the inspection, it shall double the quantity for re-inspection. If it still fails in the re-inspection, the batch of products shall be judged as unqualified.

6.4 It is allowed for both parties to negotiate and adopt other inspection rules.

7.1 Marking

There shall be a permanent trademark on the product.

7.2.1 Each knife shall be packed in paper bag or plastic bag; it is accompanied with product description, manufacturer name, qualification mark.

7.2.2 The packing box shall indicate.

- a. Product name, specification, grade;
- b. The name and address of the manufacturer;
- c. Date of manufacture and date of exit-factory;
- d. Quantity;
- e. Gross weight or net weight, kg;
- f. Volume. length x width x height, cm³;
- g. Moisture-proof mark.

7.2.3 Export packaging will be determined separately.

7.3 Transportation

Throwing, rain, and moisture shall be strictly prohibited during transportation.

7.4 Storage

The product shall be stored in a ventilated, dry warehouse, which has a relative humidity of no more than 80%. The product shall be more than 150 mm above the ground. In the absence of acid, alkali or other corrosive gases, the product will have a rust prevention period of 6 from the date of exit-factory.