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

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Product of geographical indication - Jun ware

地理标志产品 钧瓷

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1 Scope

This standard specifies the terms and definitions, the scope of protection of the geographical indication product, the requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of the geographical indication product Jun ware.

This standard applies to Jun ware approved for protection by the administrative department for quality supervision, inspection and quarantine under the Provisions for the Protection of Products of Geographical Indication.

This standard does not apply to special artistic Jun ware or to Jun ware products agreed upon between the trading parties.

3 Terms and definitions

The terms and definitions established in GB/T 3303 and GB/T 5000 and the following apply to this standard.

3.1 Jun ware. Display pieces and articles of everyday use made within the area specified in Clause 4 of this standard from kaolin, ceramic clay (black hair clay) and other raw materials produced within the administrative area of Yuzhou City, formed and biscuit fired, with a glaze using copper and iron as its principal colouring agents, sintered in a reducing atmosphere, in which the glaze layer undergoes liquid-liquid phase separation and shows the natural transmutation of the kiln.

4 Scope of protection of the geographical indication product

The scope of protection of Jun ware as a geographical indication product is limited to the area approved by the administrative department for quality supervision, inspection and quarantine under the Provisions for the Protection of Products of Geographical Indication, that is, the administrative areas at present under the towns of Shenhou and Hongchang, the townships of Qianjing and Changzhuang and the sub-district offices of Yingchuan, Xiadu, Hancheng and Juntai in Yuzhou City, as shown in Annex A.

5 Requirements

5.1.1 Raw materials. The kaolin, the ceramic clay (black hair clay) and the other raw materials shall be produced within the approved area of protection in the administrative area of Yuzhou City.

5.1.2 Body clay. There are two kinds, throwing clay and casting slip.

5.1.2.1 Moisture. The moisture of the throwing clay is 21 % to 26 % and that of the casting slip 32 % to 45 %.

5.1.2.2 Fineness. On a 250 mesh sieve the residue shall be not more than 3 %.

5.1.2.3 Chemical composition. SiO₂ content 62 % to 70 %, Al₂O₃ content 26 % to 32 %, Fe₂O₃ content 1 % to 3 %, K₂O plus Na₂O content 2 % to 3.5 %.

5.1.3 Green body. The green body shall meet the requirements of the design of the form; it shall not be deformed and shall be free of cracks, pinholes, lumps and depressions; there shall be no slip residue inside the body, joined parts shall merge into one whole, and the mould joints shall be smooth and without ridges.

5.2 Manufacturing process. The flow diagram of the production process and the manufacturing process are given in Annex B.

5.3.1 Product classification. By use, Jun ware is divided into the two broad classes of display pieces and articles of everyday use; by outward character and quality it is divided into treasure grade, fine grade and qualified grade; by size it is divided into the four classes of extra large, large, medium and small, given in Table 1 in millimetres: extra large, over 800; large, 501 to 800; medium, 251 to 500; small, less than 251.

5.3.2 The size of a product is measured as the largest of its height, its length or its diameter.

5.4.1 Appearance. The appearance shall keep the traditional transmutation character proper to Jun ware, with a milky, lustrous glaze surface. The glaze colours are keyed to red, purple, sky blue, azure and moon white, and the principal colours shown are grape purple, aubergine purple, rose purple, rose red, begonia red, cinnabar red, rouge red, cockscomb

red, flame red, fish-belly white, millet yellow and pea green, or a many-coloured interpenetrating play of colour.

5.4.2 Body quality. The body shall be dense; the fracture is grey, greyish white or greyish black and the outer surface is sauce coloured.

5.4.3 Form. The form shall express the spare decoration, the plain elegance, the dignity and generosity, the flowing line and the particular meaning proper to Jun ware.

5.4.4 Crackle patterns. The patterns are divided into hare's fleece, fish roe, ice crackle, pearl, hundred fragments, kasaya patch, earthworm track and others.

5.5 Artistic effect of the appearance of display pieces. 5.5.1 Treasure grade: the form is beautiful, the workmanship fine, the glaze colour exquisite and the crackle pattern strikingly varied and beautiful. 5.5.2 Fine grade: the form is beautiful, the workmanship fine, the glaze colour exquisite and the crackle pattern beautiful. 5.5.3 Qualified grade: the form is beautiful and the glaze colour natural.

5.6 Appearance defects and quality grading. Appearance defects and quality grading are carried out according to Table 2, which lists fifteen defects - deformation, clay slag lumps and body bubbles, running foot, lack of clay (depressions), sticking foot, sticking scar, underfiring, spots, pinholes, lack of glaze, dropped slag, melt holes, glaze bubbles, body cracks and chipping - and states for each of them the physical quantity measured, the unit of measurement, the size class concerned and what is allowed at treasure grade, fine grade and qualified grade. The following also apply: a) a visible face of an extra large piece shall carry not more than three kinds of defect, a visible face of a large piece not more than two kinds, and a visible face of a medium or small piece not more than one kind; b) the defects on extra large and large pieces shall not be concentrated in one place; c) grinding of the foot is allowed on extra large products, provided the ground surface is smooth and the artistic effect of the whole is not damaged; d) defects not covered by the standard may be treated according to their shape as similar defects.

5.7 Water absorption. This shall not exceed 5 %.

5.8 Thermal stability. After one exchange from 180 degrees Celsius into water at 20 degrees Celsius the body shall not crack.

5.9 Lead and cadmium release. Articles of everyday use shall conform to GB 12651.

6 Test methods

6.1 Size. The geometrical dimensions are measured with callipers, a rule, a tape or similar measuring instruments.

6.2 Appearance. All the appearance requirements laid down in this standard are inspected in daylight at a distance of 500 mm from the piece by visual examination, together with

touching by hand and light tapping with a finger to listen to the sound.

6.3 Body quality, form, crackle patterns and the artistic effect of the appearance of display pieces are assessed by visual examination.

6.4 Appearance defects. The mouth diameter error, the height error and the size of defects among the appearance defects are determined by the method laid down in GB/T 3301.

6.5 Water absorption is determined by the method laid down in GB/T 3299.

6.6 Thermal stability is determined by the method laid down in GB/T 3298.

6.7 Lead and cadmium release is determined by the method laid down in GB/T 3534.

7 Inspection rules

7.1 Batch formation. Single pieces or sets of the same model (or form) and the same grade, classified by outward character and by quality into treasure grade, fine grade and qualified grade, may form an inspection batch.

7.2.1 Once the inspection batch is formed the sample is drawn at random; for small and medium products it is drawn after the boxes have been closed, for large and extra large products before they are closed.

7.2.2 When an inspection batch is judged nonconforming, the product is returned by the delivering party for regrading, and may be submitted for inspection again only after the nonconforming items have been removed.

7.3 Classification of inspection. Product inspection is divided into delivery inspection and type inspection.

7.4.1 Every batch shall be inspected in full by the quality inspection department of the works against the contents laid down in this standard and graded for appearance quality; it may leave the works only after being found conforming.

7.4.2 The items of the delivery inspection are those laid down in 5.3 to 5.6 of this standard.

7.4.3.1 Display pieces are sampled piece by piece.

7.4.3.2 The delivery inspection of articles of everyday use is carried out according to GB/T 2828.1. For items 5.3 to 5.6 the nonconformity class is B, the acceptance quality limit is 4.0, the inspection level is general inspection level II, and the plan is a normal inspection single sampling plan. The sampling plan of Table 4 gives, for items 5.3 to 5.6, the sample size, the acceptance number and the rejection number against the batch range: batch not more than 25, sample 3, acceptance 0, rejection 1; batch 26 to 90, sample 13, acceptance 1, rejection 2; batch 91 to 150, sample 20, acceptance 2, rejection 3; batch 151 to 280, sample 32, acceptance 3, rejection 4; batch 281 to 500, sample 50, acceptance 5, rejection 6; batch 501 to 1 200, sample 80, acceptance 7, rejection 8; batch 1 201 to 3 200, sample 125,