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

GB/T 3299-2011

Replacing GB/T 3299-1996

Test method for water absorption of domestic ceramicware

日用陶瓷器吸水率测定方法

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 3299-1996 "Determination of water absorption of ceramic ware," compared with the GB/T 3299-1996, the main technical Surgery changes are as follows.

- Remove the sampling rules and formulas do not wear the glaze law (see the 1996 version of the 4.2 and 6.1);
- The special case of small pieces instead of six samples need not be removed article 2 of the sample can take only one sample, each sample before grinding Glaze After grinding the sample mass to the mass of about 10g should be about 10g, increase the sample should be free of cracks requirements (see 4.2,1996 in version 4.1.1);
- Boiling increase the sample immersed in water to cool to room temperature requirements (see 5.2.1);
- Increasing the vacuum method of the Arbitration Act (see 5.2.2);
- Test reports increased water saturation and water absorption and test methods described in the absorption of each batch of product requirements (see 7).

This standard ASTM C373-88 (Reapproved1999) StandardTestMethodforWaterAbsorption, BulkDensity, ApparentPorosity, andApparentSpecificGravityofFiredWhitewareProducts "has pottery Porcelain water absorption, bulk density, apparent porosity and apparent specific gravity determination, "the non-equivalent.

The standard proposed by China National Light Industry Council.

This standard by the national daily-use ceramics Standardization Technical Committee (SAC/TC405) centralized.

This standard was drafted. National Ceramic Products Quality Supervision and Inspection Center (Jiangxi), Shandong Zibo Huaguang Ceramics Co., Ltd. Chaozhou City Source Lee Ceramic Ltd, Yixing People's Republic of China Exit Inspection and Quarantine, Guangxi Sanhuan Enterprise Group Co., Ltd., Guangzhou Dongxiong British Group Limited.

1 Scope

This standard specifies the test methods for water absorption of ceramic ware.

This standard applies to household pottery, stoneware, porcelain water absorption was measured.

Principle 2

Vacuum methods or boiled, dried ceramic specimen was placed in water to saturation in water, the water absorption of the dried ceramic mass of the sample the quality of the water absorption ratio.

3 Equipment and materials

3.1

Balance. a sense of the amount of 0.001g.

3.2

Oven. working temperature up to 110 °C, the temperature difference between ± 5 °C.

3.3

vacuum. a vacuum container large enough to accommodate a degree of vacuum and the required number of test specimens and maintain not less than 0.095MPa 60min vacuum system.

3.4

boiling apparatus.

3.5

dryer.

3.6

distilled or deionized water.

3.7

Cotton. cloth flat surface.

4 Sample

4.1

Number of

The same production batch representative of three products.

4.2 Sample Preparation

At the bottom of each article to take two crack-free samples, each sample is substantially equal to the total surface area of the sample can not remove the article 2 can only Take a sample. Rubbed glaze bonding layer and sharp corners, the quality of the sample after grinding should be about 10g, the quality is not up to the sample after grinding to about 10g should maintain maximum quality possible. The abrasive wear and a sample was rinsed.

5 Steps

The sample was placed in cooling within 5.1 $110^{\circ}\text{C} \pm 5^{\circ}\text{C}$ oven dried to constant weight, packed with silica gel into the dryer to room temperature, weighed and recorded Recorded as m_0 , weighing accurate to 0.001g.

5.2.1 Boiling

The sample was placed filled with distilled or deionized water boiling apparatus between the sample and the sample is not in contact with each other means boiling, heat the water to a boil