ICS 85-010
CCS Y30

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13528-2015

Replacing GB/T 13528-1992

Paper and board - Determination of surface pH

纸和纸板 表面pH的测定

Issued on: September 11, 2015 **Implemented on: April 1, 2016**

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Standardization Administration of China

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 13528-1992 "Paper and cardboard surface pH value of the assay." And GB/T 13528-1992 compared to primary To technical changes are as follows:

--- Modify the scope;

--- Increasing the normative references;

--- Modify the test equipment;

--- Modify the test of time. Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. The standard proposed by China National Light Industry Council. The standard paper by the National Standardization Technical Committee (SAC/TC141) centralized. This standard was drafted. Suichang Xingchang Paper Co., Ltd., China Pulp and Paper Research Institute, Zhuhai Special Economic Zone Hongta Yanlord Paper Co. Limited, the national paper quality supervision and inspection center. The main drafters of this standard. Gao Jun, Li Ping, Yin Qiao Zhan Yanlin, single Li Yue, Ma Hongsheng, Wang Dongwei, Zhang Dongsheng, Li generous. This standard replaces the standards previously issued as follows:

--- GB/T 13528-1992. Paper and cardboard surface pH of

1 Scope

GB/T 13528-2015 is the Chinese national standard on paper and board - determination of surface ph, in the field of paper technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 September 2015 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2016. Classification: ICS

85-010, CCS Y30. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the method for measuring the surface pH of paper and paperboard. This standard applies to the determination of the lower surface of the water absorption of paper and cardboard can also be used for library collections of books, archives and other government agencies in the paper And cardboard surface pH measurement.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. Latitude and take samples to

GB/T 450 paper and paperboard samples, positive and negative determination Principle

3 Drop a drop of water on the surface of the sample, the flat electrode into the water droplets, the electrode pressure on the sample is kept constant within the time prescribed Test pH.

4 Instrument

4.1 pH meter. with a flat head electrode, may be immersed in a drop of water, the instrument should be temperature compensation, accurate readings to 0.01.

4.2 cushion. non-absorbent material that can make full contact with the paper surface electrode plate (such as pads, etc.).

4.3 absorbent cotton or filter paper. dry test sample surface after the liquid used.

4.4 Stopwatch. stopwatch or electronic timer.

4.5 Thermometer. Measuring range 0 °C ~ 100 °C.

4.6 volumetric flask. 1000mL.

5 Reagents

5.1 Water, distilled or deionized water. pH of water is

6.0 to 7.3, the conductivity should not exceed 0.1mS/m. When the above requirements are not met When the water, you can use a higher conductivity of water, it should be explained that the conductivity of the water in the test report.

5.2 potassium hydrogen phthalate (KHC8H4O4) solution, 0.05mol/L, 25 °C at pH 4.01.

Accurately weighed at 115 °C ± 5 °C Drying 2h ~ 3h of potassium hydrogen phthalate 10.21g, add water to dissolve and dilute to 1000mL.

5.3 potassium dihydrogen phosphate (KH_2PO_4) and disodium hydrogen phosphate (Na_2HPO_4) solution, 25 °C when pH was 6.86. Accurately weighed at 115 °C ± 5 °C drying 2h ~ 3h anhydrous potassium dihydrogen phosphate, disodium hydrogen phosphate 3.55g and 3.40g, add water to dissolve and dilute to 1000mL.

5.4 sodium tetraborate ($Na_2B_4O_7$) solution, 0.01mol/L, 25 °C when pH was 9.18. Borax accurately weighed 3.81g (taking care to avoid wind Of), add water to dissolve and dilute to 1000mL, placed in polyethylene plastic bottles, cork plugged avoid carbon dioxide into the air.