

CCS X 40



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

GB 1886.63-2015

National Food Safety Standard -- Food Additives -- Bentonite

食品安全国家标准 食品添加剂 膨润土

(English Translation)

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1 Scope

This standard applies to bentonite ore as raw material, processed prepared food additive bentonite (calcium group and hydrogen group).

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Color white, gray, khaki, light green, dark blue State powder
Take the right amount of sample is placed in white porcelain dish, Concept under natural
light its color and state police

2.2 Physical indicators

Physical and chemical indicators should be consistent with the provisions of Table 2.

Table 2. Physical and chemical indicators

Item Index Test Method pH (20g/L suspension) of 4.5 to 10.5 in Appendix A A.3 Fineness
(0.075mm test sieve), w /% $\geq$ 70.0 Appendix A A.4 Loss on drying, w /% $\leq$ 12.0 GB
5009.3 a direct drying Total arsenic (As)/(mg/kg) $\leq$ 15.0 GB 5009.11 Lead (Pb)/(mg/kg) $\leq$
35.0 GB 5009.75 a drying temperature of 105 °C $\pm$ 2 °C, drying time is 2h.

Appendix A

Testing method

A.1 General Provisions Unless otherwise specified in this standard, the use of reagents
were of analytical grade purity, the standard titration solution, impurity measurement
standard solution preparation and products, should be GB/T 601, GB/T 602 and GB/T 603
provisions of preparation, the test water should comply with GB/T 6682 in three water
Provisions. Solution was used in the tests did not indicate what is formulated with solvent, it
refers to an aqueous solution.

A.2 Identification Test A.2.1 Identification of silicate 0.5g of the sample is mixed with 2.5g of anhydrous potassium carbonate, inherent to the metal crucible furnace is heated to a molten mixture, cooled, 5mL water, standing 3min, the crucible slightly heat, add water to dissolve 50mL. Completely transferred to a beaker, was added dropwise a solution of hydrochloric acid (11) Until no bubbles. Added 10mL hydrochloric acid, evaporated to dryness on a steam bath to cool. 20mL water was added, after boiling was filtered, the insoluble gel the residue was used to identify the silicate. The filtrate was the test solution A, for the identification of aluminum.

The gelatinous residue was taken platinum crucible, 5mL of hydrofluoric acid was carefully added. The precipitate was dissolved. Heating, placed in the vapor above the crucible A glass rod moistened with a drop of water, the water droplets become cloudy.

A.2.2 Identification of aluminum ions Was added dropwise in the test solutions A (A.2.1) in aqueous ammonia solution (11), a white gelatinous precipitate, addition of excess aqueous ammonia solution (11), Shen Insoluble precipitate. Was added dropwise a solution of sodium hydroxide (40g/L) to give a white gelatinous precipitate, the precipitate dissolved when added in excess.

A.3 pH (20g/L suspension) Determination A.3.1 Instruments and Equipment pH meter. dividing the value 0.02.

A.3.2 Analysis step

Weighed amount of sample, preparation of 20g/L of water sample suspension with a pH meter to measure the pH of the suspension.

The results parallel arithmetic mean of the measurement results shall prevail. Twice under the same condition of independent determination results obtained absolute difference not more than 0.2.

A.4 Determination of Fineness (0.075mm test sieve) of A.4.1 Instruments and Equipment Test sieves. R40/3 series, Phi200 x 50-0.075/0.050 (GB/T 6003.1).

A.4.2 Analysis step

It weighs about 20g sample to the nearest 0.01g. Exposed in a test sieve, constantly shaking, beating, and gently brushing with a dry brush, the sample by the end, the underlying black paper sieve, sieve lightly until the sample pad black paper no trace. The sieve residue was transferred to a known mass the surface of the dish weighing, accurate to 0.0002g.

A.4.3 Calculation Results Fineness (0.075mm sieve test) mass fraction w_1 , according to equation (A.1) Calculated.

$m - m_1$

$m \times 100\%$

Where.

M --- the quality of the sample, in grams (g);

Mass m1 --- sieve residue in grams (g).

The results parallel arithmetic mean of the measurement results shall prevail. Twice under the same condition of independent determination results obtained absolute difference not more than 2%.