

ICS 67.220.20
CCS X 40



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

GB 1886.30-2015

Replacing GB 8818-2008

**National Food Safety Standard -- Food Additives -- Cocoa shell
color**

食品安全国家标准 食品添加剂 可可壳色

(English Translation)

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Foreword

This standard replaces GB 8818-2008 "food additive cocoa shell pigment." this standard compared with GB 8818-2008, the main changes are as follows.

--- Standard name was changed to "national food safety standards for food additives cocoa shell color." National Food Safety Standard Food Additives cocoa shell color

1 Scope

This standard applies to cocoa shells as raw material, aqueous extraction, purification, concentration, drying and prepared food additive cocoa shell color.

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Dark color State powder Take the right amount of sample is placed in a clean, dry white porcelain dish, under natural light Observe its color and status

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 6.0 ~ 7.5 in Appendix A A.3 Loss on drying, w /% ≤ 5.0 Appendix A A.4 Residue on ignition, w /% ≤ 20.0 Appendix A A.5 Absorbance E₁ m_{400nm} ≥ 20.0 A.6 in Appendix A Arsenic (As)/(mg/kg) ≤ 2.0 GB 5009.76 Lead (Pb)/(mg/kg) ≤ 4.0 GB 5009.75 Appendix A Testing method A.1 General Provisions this standard reagents and water in the absence of other specified requirements, refer to the three water analytical reagent and GB/T 6682 regulations. test Used in the standard

solution, standard solution for measuring impurities, formulations and products, did not indicate when the other requirements according to GB/T 601, GB/T 602, GB/T 603 provisions of preparation. 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 color 0.1% aqueous sample was clarity, brown; 0.1% sample 6mol/L sodium hydroxide solution, deeper color, dark brown; 0.1% Sample 6mol L hydrochloric acid solution /, a brown precipitate, and the supernatant turns brown.

A.2.2 absorption maxima 0.01% (mass fraction) aqueous solution in a visible - ultraviolet spectrophotometer, the UV portion has two absorption peaks at wavelengths 195nm Department has a maximum absorption peak, there is a small absorption peak at a wavelength of 275nm.

A.3 pH measurement

Weigh 1.0g sample was dissolved in water and transferred to 100mL volumetric flask, constant volume, measured with pH meter pH of the solution.

A.4 Determination of loss on drying A.4.1 Analysis step Weigh about 2g (accurate to 0.0002g) sample has been placed in the weighing bottle dried to constant sample thickness of about 5mm, shop all, openings at 105 °C oven drying to constant weight, placed in a desiccator to cool and weigh.

A.4.2 Calculation Results Loss on drying mass fraction w_1 , according to equation (A.1) Calculated.

$m_2 - m_1$

$m \times 100\%$

Where.

Mass m_2 --- dried before weighing bottle and the sample, in grams (g);

m_1 quality --- weighing bottles and dried sample in grams (g);

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

The test results of two parallel arithmetic mean of the measurement results shall prevail. And two independent determination results counted under repeated condition the average absolute difference operation shall not exceed 0.2%.

A.5 Determination of residue on ignition A.5.1 Analysis step Weigh about 3g sample (accurate to 0.0002g), has been placed at 700 °C ~ 800 °C constant weight porcelain crucible, slowly heated until the sample Completely carbonized. The sample was cooled carbonized, moved into a high temperature furnace, burning to constant weight at 800 °C.

A.5.2 Calculation Results Burning residue mass fraction w_2 , according to equation (A.2)

Calculated.

$m_4 - m_3$

$m \times 100\%$

Where.

m_4 --- crucible plus residue mass in grams (g);

m_3 --- crucible mass in grams (g);

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

The test results of two parallel arithmetic mean of the measurement results shall prevail. And two independent determination results counted under repeated condition the average absolute difference operation shall not exceed 0.5%.

A.6 Determination of absorbance E1 m400nm A.6.1 Instruments and Equipment Spectrophotometer.

A.6.2 Analysis step

The sample is placed in the dryer, dried at room temperature 24h, weighed 1g (accurate to 0.0002g), dissolved in water and dilute to 100mL, Shake well. With a pipette in the shake state draw 2mL sample solution, then dilute to 100mL (that is, 0.02% aqueous solution), with a spectrophotometer Meter, with water as reference solution, in 1cm cuvette, the measured absorbance at 400nm wavelength.

A.6.3 Calculation Results Absorbance E1 m400nm, according to equation (A.3) Calculated.

E1 m400nm =

Where.

A --- absorbance measurement of the sample;

f --- dilution factor;

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