



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

GB 1886.212-2016

**National Food Safety Standard -- Food Additives -- Casein
sodium (also known as casein sodium)**

食品安全国家标准 食品添加剂 酪蛋白酸钠（又名酪朊酸钠）

(English Translation)

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1 Scope

This standard applies to fresh milk degreased, the acid point of the curd or from the casein products as raw materials, by sodium hydroxide or sodium carbonate treatment, dry Dry made of food additives sodium caseinate.

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 sensory requirements

The project requires a test method Color milky white or light yellow State powder or granular Odorless, tasteless or slightly pungent odor no visible foreign matter Take appropriate sample on a clean, dry white porcelain dish in the natural light, observe the color, state and smell, and smell the smell

2.2 Physical and chemical indicators

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

Table 2 Physical and chemical indicators

Item Index Test Method Protein (dry basis), w /% ≥ 88.0 GB 5009.5 Kjeldahl method a Fat, w /% ≤ 2.0 GB 5009.6 Ash, w /% ≤ 6.0 GB 5009.4b Moisture, w /% ≤ 6.0 GB 5009.3 Direct drying method c pH 6.0 to 7.5 Appendix A, A.3 Total arsenic (in As)/(mg/kg) ≤ 2.0 GB 5009.11 Lead (Pb)/(mg/kg) ≤ 1.0 GB 5009.12 the total nitrogen content measured by Kjeldahl is multiplied by 6.38 (N x 6.38).

b burning temperature and time (825 °C $\pm$ 25 °C, 6h).

c drying temperature and time (102 °C, 3.5h ~ 4h).

2.3 Microbial limits

Microbiological indicators should be in accordance with Table 3.

3 Table, Microbiological indicators

Item Index Test Method Total number of colonies/(CFU/g) ≤ 10000 GB 4789.2 Coliform bacteria/(CFU/g) ≤ 10 GB 4789.3 plate count method Appendix A Testing method A.1 General provisions the reagents and water used in this standard, when not specified in other requirements, refer to the analysis of pure reagents and GB/T 6682 specified in the three water. Standard titration solution used in the test method, standard solution for the determination of impurities, preparations and articles, in the absence of other requirements, GB/T 601, GB/T 602 and GB/T 603. The solution used in the test refers to water when it is not specified with the formulation of the solvent Solution.

A.2 Identification test A.2.1 Solubility Slowly dispersed in water, slightly turbid, soluble in boiling water, insoluble in ethanol.

A.2.2 Burning test

Take the sample 0.1g burning smoke, and issued a specific odor, the remaining residue dissolved in water, litmus paper was alkaline.

A.2.3 Biuretization reaction Take 0.1g of sample into 10mL 1mol/L sodium hydroxide solution, add 1 drop of 6.2% copper sulfate solution, shake, produce blue sink Lake, liquid was violet.

A.2.4 isoelectric point precipitation 0.1 g of the sample was dissolved in 10 mL of 1 mol/L sodium hydroxide solution, and acetic acid was added to make it weakly acidic to produce a white flocculent precipitate.

A.2.5 color reaction Take sample 0.1g add water 5mL, shake, add 10 drops of 68.5% mercury nitrate solution and 1 drop of 10% sodium nitrite solution, in the water bath Hot 3min, after swelling on the surface of the sample showed reddish brown.

A.3 Determination of pH the sample was formulated as a 2% aqueous solution and measured at a temperature of about 20 ° C with an acidity meter.