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CCS C 53



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

GB 29988-2013

**Food additive -- Potassium alginate (alginate, potassium)
(English Translation)**

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1 Scope

This standard applies to the kelp (*Laminaria*), kelp (*Macrocystis*), *Ascophyllum nodosum* (*Ascophyllum*) brown algae and other plants were extracted Processed food additive made from seaweed potassium (potassium alginate).

Formula 2

(C₆H₇O₆K)_n

3.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Color white to yellow white porcelain dish placed on a sample taken in natural light, observed Color and Status fibrous or granular powder

3.2 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 Viscosity (20 °C) / mPa · s compliance claimed in Appendix A A.3 Loss on drying, w /% ≤ 15.0 GB 5009.3 direct drying Potassium alginate content (K₂O terms, on a dry basis), w /% 15.0 ~ 22.0 GB/T 17767.3 pH (10g/L solution) 6.0-8.0 Appendix A A.4 Water-insoluble, w /% ≤ 0.6 A.5 in Appendix A Ash (dry basis), w /% 24 ~ 32 A.6 in Appendix A Lead (Pb)/(mg/kg) ≤ 4 GB 5009.12 Total arsenic (As)/(mg/kg) ≤ 2 GB/T 5009.11 Loss on drying of dry sample items a sample taken after the determination; samples were prepared using a solution of nitric acid - perchloric acid consumption of cooking.

Appendix A

Testing method

A.1 General Provisions Unless otherwise specified in this standard, the use of analytical reagent purity should be more than the standard titration solution, standard solution for measuring impurities, Preparations and products, should be GB/T 601, GB/T 602, GB/T 603 requirements preparation, test water should be consistent with GB/T 6682-2008 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 Reagents and materials A.2.1.1 calcium chloride solution. 25 g/L.

A.2.1.2 sulfuric acid solution. 1 mol/L.

A.2.1.3 1,3- dihydroxy-Naphthyl alcohol solution (10 g/L). Weigh about 1 g 1,3-dihydroxynaphthalene was dissolved in 100 mL absolute ethanol, mixing (now Existing service).

A.2.1.4 hydrochloric acid.

A.2.1.5 isopropyl ether.

A.2.2 Preparation of sample solution Weigh approximately 1 g sample was dissolved in 100 mL of water use.

A.2.3 Identification A.2.3.1 soluble test Sample in water was slowly dissolved to form a glue-like liquid, not soluble in ethanol and 30% ethanol solution, not soluble in chloroform and ether, and pH