

CCS X 40



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

GB 1886.253-2016

National Food Safety Standard -- Food Additives -- Oxystearin

食品安全国家标准 食品添加剂 羟基硬脂精（又名氧化硬脂精）

(English Translation)

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1 Scope

This standard applies to the hydrogenated edible oil as raw material, by melting, decolorization, heating reaction, filtration and other steps processing of food prepared Tim Additive hydroxyl stearin (also known as oxidized stearin). The food additive hydroxystearin (also known as oxidized stearin) is partially oxidized with stearic acid and A mixture of other fatty acids in the glyceride.

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 brown to light brown State of grease or wax the amount of the sample evenly placed in the white enamel plate, in the natural light Under the observation of its color and state

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 Acid value (in KOH)/(mg/g) ≤ 15 Appendix A A.2 Hydroxyl value (in KOH)/(mg/g) 30 to 45 SN/T 0801.20 Iodine value (g/100g) ≤ 15 GB/T 5532 Refractive index (48 ° C) 1.456 to 1.467 Appendix A, A.3 Saponification value (in KOH)/(mg/g) 225 to 240 GB/T 5534 Unsaponifiable matter, w /% ≤ 0.8 SN/T 0801.15 Lead (Pb)/(mg/kg) ≤ 2.0 GB 5009.12 Appendix A Testing method A.1 General provisions in addition to the provisions of this standard, the purity of the reagents used are analytical pure, the standard titration solution used, the standard solution for the determination of impurities, preparation and products should be prepared according to GB/T 601, GB/T 602, GB/T 603, test water should be consistent with GB/T 6682 in the three water regulations set. The solution used in the test refers to the aqueous solution when it is not specified in the formulation of the solvent.

A.2 Determination of acid value (in KOH) A.2.1 Reagents and materials A.2.1.1 neutral ethanol solution. 95% ethanol, add 2mL phenolphthalein indicator solution, with potassium hydroxide - ethanol standard titration solution and to reddish Color, and keep for 30s without fading.

A.2.1.2 Potassium hydroxide-ethanol standard titration solution. $c(\text{KOH}) = 0.1 \text{ mol/L}$.

A.2.1.3 phenolphthalein indicator solution. 10g/L.

A.2.2 Analysis steps Weigh the sample 10g, accurate to 0.001g, placed in a conical flask, add 50mL neutral ethanol solution, heating the sample completely dissolved, with Potassium hydroxide - ethanol standard titration solution titrated to the solution was reddish, and maintain 30s does not fade, that is, the end of titration.

A.2.3 Calculation of results the mass fraction w_1 in grams (in KOH) is in milligrams per gram (mg/g) and is calculated as in formula (A.1) $w_1 = V \times c \times M$ (A.1) where.

V --- sample consumption of potassium hydroxide - ethanol standard titration solution volume, in milliliters (mL);

c - the actual concentration of potassium hydroxide - ethanol standard titration solution in moles per liter (mol/L);

M - the molar mass of potassium hydroxide in milligrams per millimole (mg/mmol) [$M(\text{KOH}) = 56.1$];

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

The results of the test are based on the arithmetic mean of the parallel measurement results. The absolute difference between the two independent determinations obtained under repeatability conditions the value is not greater than 10% of the arithmetic mean.

A.3 Determination of refractive index (48 ° C) A.3.1 Instruments and equipment Abbe refractometer.

A.3.2 Analysis steps the samples were melted and filtered through filter paper and tested with an Abbe refractometer at 48 ° C.