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CCS X 40



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

GB 1886.66-2015

**National Food Safety Standard -- Food Additives -- Monascus
yellow**

食品安全国家标准 食品添加剂 红曲黄色素

(English Translation)

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1 Scope

This standard applies to red yeast rice as raw material, alkaline elution, separation prepared Monascus red (or red to red yeast rice as raw material), the sulfide Sulfonated, made of dried food additives Monascus yellow pigment.

2.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project requires test methods Orange-red to brown color State powder Take the right amount of sample is placed in a clean, dry white porcelain dish, in natural light Under 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 the color value of E1 m (476 ± 10) nm ≥ 100 Appendix A A.3 Loss on drying, w /% ≤ 6.0 GB 5009.3 direct drying Residue on ignition, w /% ≤ 10.0 GB 5009.4 Lead (Pb)/(mg/kg) ≤ 2.0 GB 5009.75 Total arsenic (As)/(mg/kg) ≤ 3.0 GB 5009.11 Citrinin/(mg/kg) ≤ 1.0 GB/T 5009.222 Note. the commercialization of red yeast yellow product shall comply with the standard yellow red yeast rice as raw materials, food and other materials can be added dextrin made its color value in line with the identity value.

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, the provisions of the

preparation of GB/T 602 and GB/T 603, the test water should be consistent 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 solubility soluble in water.

A.2.2 maximum absorption wavelength Weigh 0.01g sample was dissolved in 100mL of water, with a spectrophotometer, this solution at a wavelength of $476\text{nm} \pm 10\text{nm}$ scope the maximum absorption peak.

A.3 color value $E_{1\text{m}}(476 \pm 10)\text{nm}$ is measured A.3.1 Instruments and Equipment Spectrophotometer.

A.3.2 Analysis step

Weigh a sample of about 0.05g ~ 0.1g, accurate to 0.0002g, dissolved in water, dilute to 1000mL, shake. Take this sample was placed Measuring the absorbance 1cm cuvette, with water as the control, using a spectrophotometer at a wavelength of $476\text{nm} \pm 10\text{nm}$ of the maximum absorption wavelength Degree (absorbance should be controlled between 0.3 and 0.7, otherwise the sample concentration should be adjusted and re-measuring the absorbance).

A.3.3 Calculation Results Color value in the test sample concentration of 1%, with a 1cm cuvette at wavelength of $476\text{nm} \pm 10\text{nm}$ measured absorbance $E_{1\text{m}}(476 \pm$

$10)\text{nm}$ dollars, according to equation (A.1) Calculated.

$E_{1\text{m}}(476 \pm 10)\text{nm} = c \times 100$ (A.1) where.

A --- measured absorbance of the sample solution;

c --- concentration of the sample solution to be tested, in grams per milliliter (g/mL);

100 --- concentration conversion factor.

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