



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

GB 1886.19-2015

Replacing GB 4926-2008

**National Food Safety Standard -- Food Additives -- Red yeast
rice**

食品安全国家标准 食品添加剂 红曲米

(English Translation)

Issued on: November 13, 2015

Implemented on: May 13, 2016

**Issued by: National Health and Family Planning Commission of the
People's Republic of China**

Table of Contents

- Foreword
- 1 Scope
- 2 Technical Requirements
 - 2.1 Requirements for raw materials
 - 2.2 Sensory requirements
 - 2.3 Physical indicators
 - 2.4 Microbiological
- 3 Table, microbiological limits

Foreword

This alternative standard GB 4926-2008 "food additive red yeast rice (powder)." this standard compared with GB 4926-2008, the main changes are as follows.

--- Standard name was changed to "national food safety standards for food additives, red yeast rice." National Food Safety Standard Red yeast rice food additives

1 Scope

This standard applies to rice as raw material, the genus *Monascus* (*Monascus*) *Monascus* fermentation obtained, red particle (or particles Tablets into powder) food additive red yeast rice.

2.1 Requirements for raw materials

Rice shall comply with the provisions of GB 1354.

2.2 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 Sensory requirements

Project granular powder test method Exterior Red to dark purple, crisp texture, no mold Change, no visible impurities, was Irregular granular Brown to dark purple, no mildew, no Visible impurities, pink Red to red flour off -Have inherent odor red yeast aroma song Take 100g sample on white paper, with the naked eye watch its color, mildew particles (powder) and impurities; with Knife cut red yeast rice, its section was observed; Wash Hands, take about 10g sample is placed in the hands of olfactory its odor

2.3 Physical indicators

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

Table 2. Physical and chemical indicators

project

Claim

Granular powder

Testing method

Moisture /% ≤ 10.0 GB 5009.3 Aflatoxin B₁/(μg/kg) ≤ 5 GB/T 5009.22 Color value/(μg)
 ≥ 1000.0 Appendix A A.2 Fineness 150μm (100 mesh) pass rate /% ≥ - 95.0 Appendix A
 A.3 Total arsenic (As)/(mg/kg) ≤ 1.0 GB 5009.11 Heavy metals (Pb)/(mg/kg) ≤ 10.0 GB
 5009.74

2.4 Microbiological

Microbial limits shall conform to Table 3.

3 Table, microbiological limits

Project Limited test methods Coliform/(MPN/g) ≤ 3.0 GB 4789.3 Salmonella not detected
 GB 4789.4 Shigella not detected GB 4789.5 Staphylococcus aureus not detected GB
 4789.10 Appendix A Testing method A.1 General Provisions this standard reagents and
 water, did not indicate when the other requirements, refer to analytical reagent and third
 grade water GB/T 6682 regulations.

Standard solutions used in the tests, impurity standard solution, preparations and products,
 did not indicate when the other requirements, according to GB/T 601, GB/T 602 and the
 provisions of GB/T 603 formulation. Solution was used in the tests did not indicate what is
 formulated with solvent, it refers to an aqueous solution.

A.2 Determination of Color Value A.2.1 Reagents and materials Ethanol. 70%.

A.2.2 Instruments and Equipment A.2.2.1 grinder.

A.2.2.2 Spectrophotometer.

A.2.2.3 water bath. Temperature accuracy ± 0.5 °C.

A.2.3 Analysis step

The sample was crushed with a grinder, which samples can be over 250μm ~ 380μm (40
 mesh to 60 mesh) screen.

Accurately weighed sample to crush mixed 0.2g (accurate to 0.001g), was dissolved in 70%

ethanol solution and transferred to 100mL Volumetric flask to the mark, placed in 60 °C ± 0.5 °C water bath, soak accurate 1h, then cool to room temperature and added 70% ethanol solution to the mark, and mix. With filter paper and the filtrate was collected in a tube with a stopper colorimetric, spare.

Imbibe above filtrate 2.0mL ~ 5.0mL to 50mL volumetric flask (so that the final dilution range of 0.3 to 0.6 absorbance falls Inside), with 70% ethanol solution was diluted to volume to 50mL, shake, with 10mm cuvette, 70% ethanol solution as a reference, at a wavelength 505nm, the absorbance was measured which the sample immersed dilution A.

A.2.4 Calculation Results Color value X1 (μ/g), according to formula (A.1) Calculated.

$$X1 = A \times$$

Where.

A --- soaking absorbance diluent;

100 --- conversion factor;

m1 --- weighed sample mass, in grams (g);

50 --- conversion factor;

V --- draw volumes of ethanol infusions, in milliliters (mL).

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

A.3 fineness 150μm (100 mesh) by measuring the rate of A.3.1 Instruments and Equipment

A.3.1.1 standard test sieve 75μm (200 mesh).

A.3.1.2 Analytical Balance. Accuracy ± 0.2mg.

A.3.2 Analysis step

Weigh red yeast rice 100g (accurate to 0.2g).

The standard screen is mounted on a predetermined screen chassis, and then said good sample is transferred fully into the sieve, covered, shaking screening 5min (often knock Bang play screen), standing 2min, remove the cover, carefully sieve were all transferred to a beaker of known mass, weighing scales, calculations.

A.3.3 Calculation Results Sample Fineness 150μm (100 mesh) pass rate w, according to equation (A.2) Calculated.

$$100 - m_2$$

$$100 \times 100\%$$

Where.

Quality 100 --- sample in grams (g);

Mass m_2 --- sieve material in grams (g).

The results parallel arithmetic mean of the measurement results shall prevail (reserved integer). Two independent measurement results obtained under repeatability conditions If the difference is not more than 1%.

5102-

91 6881