

RICE BRAN OIL

This product is the fatty oil derived from rice bran of seed of *Oryza sativa* Linné (*Gramineae*).

Manufacturing method

Extract oil ingredient from rice bran of seed of *Oryza sativa* Linné (*Gramineae*) with n-hexane, and then remove n-hexane by distillation to obtain the product.

Description

This product is a light yellow oil. It has slightly characteristic odor.

Identification

- γ - Oryzanol

Determine the IR absorbance by liquid membrane method; it exhibits a maximum at the wavelength at 2930, 2860, 1745 and 1165 cm^{-1} .

Saponification value : 185 to 195

Acid value : 0.2 max.

Take 75mL of a mixture of ether and ethanol (2:1) as solvent, add 2 to 3 drops of alkali blue 6B indicator (*1) to the solvent, and neutralize with 1 drop of 0.1mol/L potassium hydroxide solution. (The color of the solution changes from blue to reddish purple color, if the color of the solution does not change, furthermore, add 1 drop of 0.1mol/L potassium hydroxide solution until it changes into reddish purple.)

Weigh accurately approx. 20g of this product, and add the former neutralized solvent. Shake whole well to dissolve and titrate with 0.1mol/L potassium hydroxide solution until the color of the solution changes from blue through green to yellowish green. (Then add 0.1mol/L potassium hydroxide solution: the color of the solution changes to yellow.)

*1...Dissolve 2g of alkali blue 6B (Chroma) in 100mL of water which was removed carbon dioxide gas.

Iodine value : 90 to 115

Unsaponifiable matter : 5.0 % max.

Purity

- Heavy metals

Treat with 2.0g of this product according to the Method 3, and perform the test: the limit is not more than 10 ppm. Treat the control solution, 2.0mL of the standard lead solution, by same procedure.

- Arsenic

Prepare the test solution, 2.0g of this product according to the Method 3, and perform the test: the limit is not more than 1 ppm.

Bacteria Count

Take 5g of this solution and dissolve with diluent to make 50mL test solution. Perform the bacteria count test according to the Hygiene Test Method; the limit is not more than 1×10^2 cfu/g.

Mold Count

Take 5g of this solution and dissolve with diluent to make 50mL test solution. Perform the mold count test according to the Hygiene Test Method; Negative (not observe any colony)

Coli form

Take 1mL of the solution which was prepared for the bacteria count test and perform the coli form test according to the Hygiene Test Method; Negative (not observe any colony)

These standards and test methods are referred to the General Notices and General Tests, Processes and Apparatus of The Japanese Standards of Quasi-drug Ingredients, unless otherwise notifications specified.

Product Name	: RICE BRAN OIL
Expiry date	: 2 years from date of manufacturing
Storage	: Store in a dry, ventilated location. Keep away from high temperature and sunlight, store in the closed containers
Manufacturer	: ORYZA OIL & FAT CHEMICAL CO., LTD. 1 Aza Numata Kitagata Kitagata-cho Ichinomiya-city, Aichi-pref. 493-8001 JAPAN

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