



ORYZA OIL & FAT CHEMICAL CO.,LTD.

1 Aza Numata Kitagata Kitagata-cho Ichinomiya-city, Aichi-prefecture 493-8001 JAPAN
 Phone:+81-586-86-5141 Facsimile:+81-586-86-6191
 URL/http://www.oryza.co.jp/ E-mail:info@oryza.co.jp

PRODUCT STANDARD

PRODUCT NAME : **GAMMA ORYZANOL** (FOOD)

This product is extracted and refined from the rice bran of *Oryza sativa* Linne (Gramineae).
 Dried product contains minimum of 98.0% γ -oryzanol ($C_{40}H_{58}O_4$).

<u>Appearance</u>	White or slightly yellow colored crystal or crystalline powder. It has no smell or slightly unique smell.	
<u>Certification Test</u>	(1) The absorbance at the maximum wave length of n-Heptane solution (1 →100,000) is at 231 nm, 291 nm, and 315 nm. (2) To 0.01 g of this product, add 10 mL of Potassium hydroxide-ethanol. After heating, a yellow color develops. (3) Dissolve 0.01 g of this product with 2 mL of acetone, add 0.1 mL of Ferric chloride/ethanol solution(1→50). Green to yellow-green color develops.	
<u>Content of γ-Oryzanol</u>	Min. 98.0 %	(UV)
<u>Loss on Drying</u>	Max. 0.5 %	(Analysis for HygienicChemists, 1g, 105 °C, 1 hr)
<u>Ignition Residue</u>	Max. 0.5 %	(The Japanese Standards for Food Additives)
<u>Purity Test</u>		
<u>(1)Heavy Metals (as Pb)</u>	Max. 10 ppm	(Sodium Sulfide Colorimetric Method)
<u>(2)Arsenic (as As₂O₃)</u>	Max. 1 ppm	(Standard Methods of Analysis in Food Safety Regulation, The Third Method, Apparatus B)
<u>Standard Plate Counts</u>	Max. 1×10^2 cfu/g	(Analysis for Hygienic Chemists)
<u>Moulds and Yeasts</u>	Max. 1×10^2 cfu/g	(Analysis for Hygienic Chemists)
<u>Coliforms</u>	Negative	(Analysis for Hygienic Chemists)
<u>Composition</u>	<u>Ingredient</u>	<u>Content</u>
	γ -oryzanol	100%
<u>Expiry date</u>	2 years from date of manufacturing.	
<u>Storage</u>	Store it in a cool, dry, ventilated area with desiccant. Keep it away from high temperature and sunlight, and store it in a closed container.	

Established Date	April 1, 1997
Revised Date	December 6, 2018
Specification No.	K-806EN