

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: $ORYZA~GAMMAX^{\textcircled{R}}$ (FOOD)

(Substance name: γ -Oryzanol)

This product is extracted and refined from the rice bran of *Oryza sativa* Linne (Gramineae). Dried product contains minimum of 85.0% γ -Oryzanol.

Appearance	White or light yellowish crystalline powder.		(Visual inspection
<u>Odor</u>	No or slight characteristic odor.		(Physical inspection)
<u>γ-Oryzanol</u>	≥ 85.0 %	(HPLC)	
Melting point	150 - 185 °C	(The Japanese Standards for Food Additives)	
Loss on Drying	≦ 0.5 %	$(105^{\circ}\text{C for 2 hr})$	
Residue on Ignition	≦ 0.5 %	(550°C for 3 hr)	
Purity Test			
(1) Arsenic	≦1 ppm	(Atomic Absorption Spectrop	photometry)
(2) Lead	≦1 ppm	(Atomic Absorption Spectrop	photometry)
(3) Mercury	≦ 0.1 ppm	(Cold Vapor Atomic Absorpt	tion Spectrophotometry)
(4) Cadmium	≦ 0.1 ppm	(Atomic Absorption Spectrop	photometry)
(5) Tungsten	≦ 50 ppm	(ICP-OES (US EPA 3056))	
Standard Plate Counts	$\leq 100 \text{ cfu/g}$	(Standard Plate Count Agar)	
Moulds and Yeasts	$\leq 100 \text{ cfu/g}$	(Potato Dextrose Agar)	
<u>Coliforms</u>	N.D./ 10g	(Brilliant Green Lactate Bile	Medium)

Guarantee of quality period Two years after production.

Storage Sealed and store in a cool, dry, dark place.

Established Date	April 1, 1997	
Revised Date	February 23, 2018	
Specification No.	M-823TO	