



## ORYZA OIL & FAT CHEMICAL CO.,LTD.

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### PRODUCT STANDARD

PRODUCT NAME : **RED GINGER EXTRACT-P** (FOOD)

This product is extracted from red ginger, the rhizome of *Zingiber officinale* var. Rubra, with aqueous ethanol. It guarantees minimum 6.0% [6]-gingerol and [6]-shogaol, and 1.5% tannin. Moreover, a peak of 3R,5S-[6]-gingerdiol can be observed in HPLC chromatogram of this product.

#### Appearance

Pale yellow or yellowish brown powder with unique smell and pungent flavor

#### [6]-gingerol and [6]-shogaol

Min. 6.0 % (HPLC)

#### Tannin

Min. 1.5 % (Vanillin · HCl method)

(Equivalent of procyanidin B<sub>2</sub>)

#### 3R,5S-[6]-gingerdiol

A peak is detectable (HPLC)

#### Loss on Drying

Max. 10.0 % (Analysis for Hygienic Chemists,  
1g, 105°C, 2 hr)

#### Purity Test

##### (1)Heavy Metals (as Pb)

Max. 30 ppm (Sodium Sulfide Colorimetric Method)

##### (2)Arsenic (as As<sub>2</sub>O<sub>3</sub>)

Max. 1 ppm (Standard Methods of Analysis in Food Safety Regulation, The Third Method, Apparatus B)

#### Standard Plate Counts

Max. 3×10<sup>3</sup> cfu/g (Analysis for Hygienic Chemists)

#### Moulds and Yeasts

Max. 1×10<sup>3</sup> cfu/g (Analysis for Hygienic Chemists)

#### Coliforms

Negative (Analysis for Hygienic Chemists)

#### Composition

<u>Ingredient</u>	<u>Content</u>
Red ginger extract	50%
Cyclodextrin	50%
Total	100%

#### Expiry date

2 years from date of manufacturing.

#### Storage

Store it in a cool, dry, ventilated area with desiccant. Keep it away from high temperature and sun light, and store it closed container.

Established Date	May 22, 2006
Revised Date	September 19, 2018
Specification No.	R-819EN