



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

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## PRODUCT STANDARD

PRODUCT NAME: **YUZU SEED EXTRACT-WSP** (FOOD)

This product is extracted with aqueous ethanol from Yuzu seed of *Citrus junos* (Rutaceae).

This product is water-soluble.

### Appearance

White or Slightly yellow-brown powder with slightly unique smell.

### Certification Test of Limonin

Mix the product (3 g) with water (20 mL) and then add ethyl acetate (20 mL). Shake the mixture for 5 min and collect the ethyl acetate layer to another container. Add ethyl acetate (20 mL) to the water layer and repeat the previous shaking step. Collect the ethyl acetate layer and evaporate whole ethyl acetate layer at 40° C. Collect the solid residue with methanol and fill it up with methanol to 10 mL volume flask. Filter through the solution by 0.45 μ m PTFE filter. For the standard solution, dissolve limonin with methanol to 0.2 mg/mL. Analyze 10 μL each solution by HPLC according to the method described in the analytical procedure sheet. The peak of limonin can be found in the HPLC chromatogram of the test solution.

### Loss on Drying

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

### Purity Test

(1)Heavy Metals (as Pb)

Max. 10 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

#### Moulds and Yeasts

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

#### Coliforms

Max. 1×10<sup>2</sup> cfu/g (Analysis for Hygienic Chemists)

Negative (Analysis for Hygienic Chemists)

### Composition

Ingredient Content (Values are just a guide)

Maltodextrin 90 %

Yuzu Seed Extract 10 %

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 sunlight, and store it in a closed container.

Established Date	November 29, 2004
Revised Date	June 29, 2020
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