

## VeryBerry™ ACNEcare

This product is a mixture of 1,3-Propanediol solution of the seed of *Actinidia chinensis* Planch (*Actinidiaceae*), the fruit of *Fragaria × ananassa* Duch. (*Rosaceae*), seed of *Citrus junos* Sieb. Et Tanaka (*Rutaceae*), the peel of *Citrus unshiu* Marcowicz. (*Rutaceae*) and the peel of *Garcinia mangostana* L. (*Clusiaceae*), powdered extract of the leaf/seed/skin of *Vitis vinifera* L. (*Vitaceae*), Allantoin, Dipotassium Glycyrrhizate, Salicylic acid and Sodium hydroxide.

### Manufacturing method

Extract solution with 1,3-Propanediol solution from mixture of the seed of *Actinidia chinensis* Planch (*Actinidiaceae*), the fruit of *Fragaria × ananassa* Duch. (*Rosaceae*), the seed of *Citrus junos* Sieb. Et Tanaka (*Rutaceae*), the peel of *Citrus unshiu* Marcowicz. (*Rutaceae*) and the peel of *Garcinia mangostana* L. (*Clusiaceae*). Then mix the solution with powdered extract of the leaf/seed/skin of *Vitis vinifera* L. (*Vitaceae*), Allantoin, Dipotassium Glycyrrhizate, Salicylic acid and Sodium hydroxide, after mixing, and filter the mixture to obtain the product.

Raw material mixture : 90 g → Product: approximately 0.8–1 kg

### Description

This product is reddish yellow to dark reddish brown liquid, with slightly characteristic odor.

### Identification

- Anthocyanin (Grape leaf/seed/skin extract)  
Add 5 mL of methanol to 1 drop of this product, and heat at 80°C for 10 minutes in a water bath, and add 0.2 mL of hydrochloric acid; pale red color develops.
- Flavonoid (Citrus unshiu peel extract)  
Take 1 mL of this product, and add methanol to make 50 mL as the test solution. Use 2 mL of this test solution, add 0.1 g of magnesium ribbon and 1mL of hydrochloric acid and allow to stand; pale yellow to pale red color develops.
- Saponin (Citrus junos seed extract)  
To 0.3 mL of this product add 5 mL of acetic anhydride. Add gently 1 mL of sulfuric acid; reddish brown color develops in contact zone.
- Polyphenol (Strawberry fruit extract)  
Add 3.5 mL of water to 30 µL of this product, add 0.2 mL of Folin-Denis TS\*<sup>1</sup> and 0.4 mL of saturated sodium carbonate\*<sup>2</sup>; blue color develops.

\*1: Folin-Denis TS: Dilute the Folin-Ciocalteu reagent 2-fold with water

\*2: Add 35 g of Sodium carbonate, anhydrous with 100 mL of water and dissolve at 70 to 80 °C. Allow to

stand for 1 night, remove the precipitate and use supernatant solution.

- Sugar (Kiwi seed extract)

To 0.5 mL of this product add 2 to 3 drops of  $\alpha$ -naphthol • ethanol solution and shake well, add gently 1 to 2 mL of sulfuric acid; reddish purple color develops in contact zone.

- Xanthone (Mangostin peel extract)

Add 2 mL of diethyl ether to 1mL of this product, mix and allow to stand. Add 200  $\mu$ L of 1N sodium hydroxide to 1 mL of upper layer in this solution; yellow to red color develops in lower layer.

- Salicylic acid

1 mL of this product exhibit with 5 to 6 drops of dilute iron (III) chloride TS; red color develops. The color changes to purple and then fades when dilute hydrochloric acid is added dropwise.

- Allantoin

Add 10 mL of dilute hydrochloric acid to 2 mL of this product, boil for 5 minutes, add 10 mL of Phenylhydrazine Hydrochloride solution (1 $\rightarrow$ 100) and cool. Add 0.5 mL of potassium ferricyanide and 1 mL of hydrochloric acid to this solution; pale red color and turn redder over time.

- Dipotassium Glycyrrhizate

Add 5 mL of water and 3 mL of hydrochloric acid to 2 mL of this product and distill. This distillate exhibit with 3 to 4 drops of 2,4-Dinitrophenylhydrazine TS; reddish orange color develops, and yield a reddish orange precipitate over time.

**pH** (1 $\rightarrow$ 10)      4.0 to 6.0

### **Purity**

- Heavy metals

Take 1.0 g of this product to determine heavy metals according to the method 2: the limit is not more than 20 ppm. Use 1.0 mL of standard lead solution as the control solution.

- Arsenic

Take 1.0 g of this product to prepare the test solution according to method 3, and perform the test: the limit is not more than 2 ppm.

### **Bacterial Count**

Take 5g of this solution, make 50mL test solution with diluent and perform the bacterial count test, using standard agar medium according to Hygiene Test Method; the limit is not more than  $1 \times 10^2$  cfu/g.

### **Fungus Count**

Take 5g of this solution, make 50mL test solution with diluent and perform the fungus count test

using potato dextrose agar medium added chloramphenicol according to Hygiene Test Method; the limit is not more than  $1 \times 10^2$  cfu/g.

### Coliforms

Take 1mL of the solution which prepare the bacterial count test, and perform the coli form test using BGLB medium according to Hygiene Test Method; Negative / Not observe any colony.

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

Product Name	: VeryBerry™ ACNEcare
Expiry date	: 2 years from date of manufacturing
Storage	: Store in a cool, 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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