

ORYZA SQUALANE

Cosmetic Agents for Moisturizing

■ **ORYZA SQUALANE**



ORYZA OIL & FAT CHEMICAL CO., LTD.

ver. 2.0M

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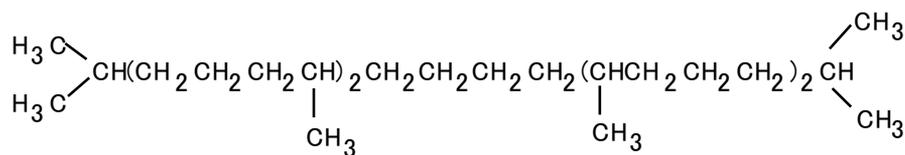
Rice has been widely grown in the Southeast Asia, not only as a chief crop but also as acts an integral part of traditional culture and lifestyle of some Asian countries. Especially, this oil has an important role, the only oil used domestic materials, has been used as foods and cosmetics. In the course of our investigation on rice bran and germ for a long time, some products were developed by containing in it, and have been used as medicines, cosmetics, health foods, and food additives. Recently, rice squalene were extracted from rice bran and rice germ, and produced by Oryza Oil & Fat Chemical Co., Ltd named as ORYZA SQUALANE.

1. Squalane

Squalane, a saturated hydrocarbon($C_{30}H_{62}$), is obtained by hydrogenation of squalene, which have been used as cosmetics for moisturizer. At present, squalane is used as cosmetics, medicines and sometimes used with fibers.

Squalene, a material for squalane, is contained shark liver oil, rice, olive, soybean, and so on. Until now it was only obtained from shark liver oil, which can contain a lot of squalene than vegetable oil. However, it is well known that extensive fishing has reduced quantity of sharks in some areas and led to occasional shortages. Moreover, there is a growing concern about the environment and a higher ecological sensitivity among consumers. In addition, there are some problems, in the following, pollution in marine animals by dioxin and agricultural chemical, shark liver oil include pristane.

2. Structure of Squalane


 $\text{C}_{30}\text{H}_{62} : 422.82$

3. Characteristics of ORYZA SQUALANE

- 100% rice origin
- No pristane
- Spread well
- Tasteless and odorless
- Low volatilization
- Penetration well into the skin
- Stability well
- Light feel than liquid paraffin

4. Practical Applications of ORYZA SQUALANE

Applications	Examples
Cosmetics	Base cosmetics(Lotion, Milk, Cream, and so on) Body cosmetics(Body lotion, Body cream, and so on) Cleansing cosmetics(Soap, and so on) Makeup cosmetics(Lipstick, Foundation, and so on)
Fibers	Lingerie, Stocking, and so on

5. Packaging

Filling nitrogen

15kg : Can

6. Storing Method

Store in dark place, avoid heat and humidity.

PRODUCT STANDARD

PRODUCT NAME

ORYZA SQUALANE

This product is squalane that be obtained by distillation and hydrogenation of squalene from rice bran oil. Quantity of squalane is more than 75.0%.

<u>Appearance</u>	This product is colorless and odorless liquid oil.	
<u>Certification Test</u>	Dissolve 0.4g of this product with n-hexane in a 100 ml volumetric flask, and add n-hexane to volume(solution A). On the other hands, dissolve 0.4g of “squalane” with n-hexane in a 100 ml volumetric flask, and add n-hexane to volume(solution B). Analysis is performed by gas chromatography(GC). Use 1.0 μ l of solution A and B, retention time of A solution shows same retention time of B solution.	
<u>Squalane</u>	Min. 75.0% (GC)	
<u>Gravity</u>	$d_{20}^{20} = 0.808 \sim 0.829$	
<u>Ignition Residue</u>	Max. 0.10%(5g)	
<u>Purity Test</u>		
(1) Heavy Metals (as Pb)	Max. 10ppm	Add nitric acid (10ml) to this product (2.0g) and gently heat. After cooling, add sulfonic acid (5ml) and heat the mixture. Add nitric acid (3ml) and heat. If colored product remain, add nitric acid (2ml) and perchloric acid (1ml) and heat. Add phenol phthalein reagent (1 drop) and ammonium reagent. Fill up the solution to 50ml with diluted acetic acid (2ml) and water(test solution). Heavy metal content in the test solution is less than 10ppm used Pb solution as a standard.
(2) Nickel		After 5.0g of this product is dissolved in 5 ml of diluted hydrochloric acid for 1 minute, ammonia liquid is added to the water layer to be alkalified. Then, 50 mg of lead dioxide, a drop of sodium hydroxide, and 1 ml of dimethylglyoxime solution are added to the water layer, it dose not occur red coloring.
(3) Arsenic (as As ₂ O ₃)	Max. 1ppm	
Standard Plate Counts	Max. 1×10^2 cfu/g	(Analysis for Hygienic Chemists)
Moulds and Yeasts	Negative	(Analysis for Hygienic Chemists)
Coliforms	Negative	(Analysis for Hygienic Chemists)

Composition

Ingredients	Contents	Composition	Contents
Vegetable Squalane	100 %	Squalane from Rice	75 %
		Hydrocarbon from Rice	25 %
INCI Name: Squalane		Total	100 %

Ref: The Japanese Standards of Quasi-Drug Ingredients. The product is suitable for Vegetable squalane listed in the Japanese Standard of Quasi-Drug Ingredients (No. 520576).

ORYZA OIL & FAT CHEMICAL CO., LTD. striving for the development of the new functional food materials to promote health and general well-being.

From product planning to OEM - For any additional information or assistance, please contact :

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