

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: JAPANESE BUTTERBUR EXTRACT-WSPC

(COSMETIC)

This product is extracted with aqueous ethanol from Japanese butterbur, the stem and the leaves of *Petasites japonicus* (Compositae). This product is water-soluble.

Appearance Certification Test Fukinolic acid Slight yellowish powder with slight characteristic odor.

After a small amount of methanol (HPLC grade) is added to 250mg of this product in a 10mL volume flask, and the flask is treated with ultra-sonic wave for 10 minutes. The solution is filtered through a 0.45 μ m PTFE filter after addition of methanol (HPLC grade) to adequate volume. For preparation of standard solution, methanol (HPLC grade) is added to fukinolic acid, and the concentration is prepared 0.1mg/mL (standard solution). HPLC analysis is performed according to the following conditions for 5 μ L of test solution and standard solution. The peak of fukinolic acid is found in the HPLC chromatogram of test solution.

< HPLC condition >

Column : capcellpak C18 (4.6 mm $\phi \times 250$ mm) Mobile phase : Solvent A = Citric acid solution

(citric acid monohydrate 2.1g→1L)

Solvent B = Methanol

Condition of gradient

Time(min)	0	19	25	35	50	60	61	70
Mobile	100%	100%	80%A	80%A	60%A	60%A	100%	100%
phase	A	A	20%B	20%B	40%B	40%B	В	В

Flow rate : 1.0mL/min Detector : UV 324 nm

Column temperature : 30°C

Total polyphenols Min. 1.0 % (Folin-Denis method)

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 As₂O₃) Max. 1 ppm (Standard Methods of Analysis in Food

Safety Regulation, The Third Method, Apparatus B)

Standard Plate CountsMax. 1×10^2 cfu/g(Analysis for Hygienic Chemists)Moulds and YeastsMax. 1×10^2 cfu/g(Analysis for Hygienic Chemists)ColiformsNegative(Analysis for Hygienic Chemists)



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

<u>Composition</u> <u>Ingredient</u> <u>Content (Values are just a guide)</u>

Dextrin80 %Petasites Japonicus Leaf / Stem Extract20 %Total100 %

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	July 21, 2006
Revised Date	November 2, 2018
Specification No.	Y-802EN