





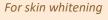






WHITENING

ANTI-INFLAMMATORY



BIO-OSLP

INCI NAME: GLYCYRRHIZA GLABRA(LICORICE) ROOT EXTRACT



GENERAL DESCRIPTION FOR RAW MATERIAL

Glycyrrhiza glabra L. (Leguminosae) is a 1.2-1.8m tall, upright hairless perennial plant. Leaves pinnate with 9-17 leaflets and flowers pale blue, pea-like and roots are brown, cylindrical. The root has been used in many medicinal applications such as relieving coughs, sore throats, skin and gastric inflammations as well as a flavoring agent in sweets as it is 50 times sweeter than sugar. Licorice, root of Glycyrrhiza glabra L. (Leguminosae), pea family plant, is favorite herb of both oriental and western from old times. It was recorded as an important medicine in Bonchokyoung and Sanghanlon in oriental medicine and also used as expectorant and Kyomiyak (herb added to other drugs to remove bad tastes and smell of them) in western medicine. Recently, anti-ulcer, anti-inflammation and mitigation ability of licorice are drawing attention1)2). The main ingredient of licorice is glycyrrhizin of triterpenoid and other 30 and more flavonoid compounds are known1)-4). Among them, glabridin is well known for its strong effect on inhibition of tyrosinase activity.

EFFICACY

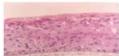
Skin permeability test by 3D artificial skin







UVB(0.05J/cm/day for 5 days) irradiation only







UVB irradiation 0.05J/cm/day for 5 days with OSLP

H/E: Tissue morphology

F-M: Melanins

HMB-45: Melanocyte& Premelanosomal vesicle

SPECIFICATION

Appearance	Yellow brown ~ brown powder	
Odor	Typical	
UV Absorbance Peak	Max. 344 ± 2nm	
Loss on drying (1g, 105°C, 1hr)	≤ 5.0%	
Residue on ignition (1.0g, 450~550°C)	≤ 0.5%	
Assay (Glabridin)	Min. 40%	
Microbes	≤ 100 cfu/ml	
Preservative	NONE	













ANTI-INFLAMMATORY

TECHNICAL INFORMATION

Processing & Dosage

The recommended dosage of BIO-OSLP is 0.05% to obtain a significant skin whitening effect. BIO-OSLP is an oil soluble active ingredient, but due to its sensitivity to heat it is recommended to incorporate it into formula at the last phase of the formulation at about 40°C after dissolving in 1,3 Butylene Glycol..

Storage & Shelf life

BIO-OSLP should be stored in a dark, cool and clean place in a tightly closed container. If stored in these conditions the shelf life is at least 24 months. Once the original packing is open, it is highly recommended to use at once.

Safety information

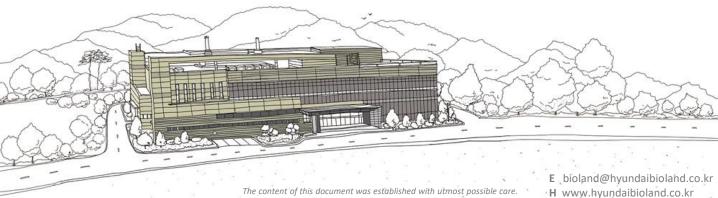
The toxicological profile of BIO-OSLP was assessed by human patch test.

- No. of volunteers: 30 (Male: 13, Female: 17)
- Test material: A cream containing 0.05% BIO-OSLP
- Result: No irritation was observed.

PRODUCT INFORMATION

TRADE NAME	BIO-OSLP
INCI NAME	COMPOSITION (INCI Key Index)
GLYCYRRHIZA GLABRA (LICORICE) ROOT EXTRACT	А
STANDARD PACKAGE	0.1KG

INCI Key Index	
A : Greater than 50%	
B : Greater than 25% but less than or equal to 50%	
C : Greater than 10% but less than or equal to 25%	
D : Greater than 5% but less than or equal to 10%	
E: Greater than 1% but less than or equal to 5%	
F: Greater than 0.1% but less than or equal to 1%	
G: Less than or equal to 0.1%	



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