

WHITENING



For natural whitening

MULBERRY ROOT EXTRACT & POWDER

INCI NAME(EXTRACT): WATER / BUTYLENE GLYCOL / MORUS ALBA ROOT EXTRACT

INCI NAME(POWDER): MORUS ALBA ROOT EXTRACT / HYDROXYPROPYL CYCLODEXTRIN



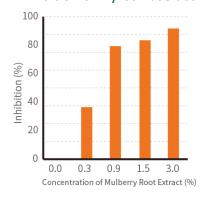
GENERAL DESCRIPTION FOR RAW MATERIAL

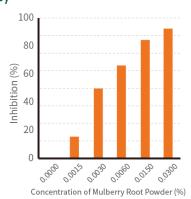
Morus alba L. is a deciduous tree, 3-15m tall, bark of large stems brown, rough; fissures mostly vertical. The root bark occurs as twisted quills, troughs or plates, 1-4mm thick; the outer surface is white or light yellowish-white, quite smooth, sometimes with orange-yellow or brownish-yellow residual corks; the inner surface is yellowish or grayish-yellow with longitudinal wrinkles; the fracture plane is strongly fibrous, starchy; the taste is slightly sweet.

The phenolics and phenylflavone content of the MULBERRY ROOT EXTRACT can inhibit tyrosinase activity and, thus, the formation of melanin. It can be used as a skin lightening ingredient in skin care products as well as in sun care products to protect against potential pigment disorders and skin damage caused by overexposure to the sun.

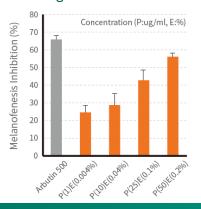
EFFICACY

Inhibition of Tyrosinase activity





Melanogenesis Inhibition



SPECIFICATION

Mulberry Root Extract

Appearance	Red brown liquid
Odor	Typical
Refractive Index (N _D ²⁰)	1.370 ~ 1.420
pH (1→10)	5.0 ~ 7.0
Specific Gravity (d20/20)	1.010 ~ 1.040
Dry Residue (1g, 105°C, 3hr)	0.5 ~ 2.5%
Total bacterial count	Not more than 100cfu/mL
Yeast & molds	Not more than 10cfu/mL

Mulberry Root Powder

Appearance	brown powder
Odor	Typical
HPLC	Fingerprint
Ash content	Not more than 10%
Loss on drying (1g, 105°C, 3hr)	Not more than 5%
Total bacterial count	Not more than 100cfu/mL
Yeast & molds	Not more than 10cfu/mL







TECHNICAL INFORMATION

Processing & Dosage

The recommended dosage of MULBERRY ROOT EXTRACT is 1.0% ~ 3.0%, MULBERRY ROOT POWDER is 0.01% ~0.05%. MULBERRY ROOT EXTRACT & POWDER are water-soluble active ingredient. In order not to disturb the structure and conformation of the actives, There are recommended to incorporate it into formula at the last phase of the formulation at about 40°C.

Storage & Shelf life

MULBERRY ROOT EXTRACT & POWDER should be stored at room temperature in a tightly closed and lightproof package. If stored in these appropriate conditions the shelf life is at least 24 months. Once the original packing is opened, it is highly recommended to use at once.

Safety information

As traditional Chinese medicine, the bark of Morus alba L. is known to use to treat cough, wheezing, and to promote urination. It is also used to treat fever, headache, red dry and sore eyes. Based on its usage as a medicine, MULBERRY ROOT EXTRACT & POWDER are believed as a safe material for cosmetic use.

PRODUCT INFORMATION

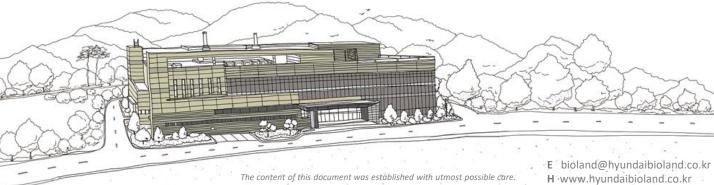
Mulberry Root Extract

TRADE NAME	MULBERRY ROOT EXTRACT
INCI NAME	COMPOSITION (INCI Key Index)
WATER	В
BUTYLENE GLYCOL	В
MORUS ALBA ROOT EXTRACT	E
STANDARD PACKAGE	20KG

Mulberry Root Powder

TRADE NAME	MULBERRY ROOT POWDER
INCI NAME	COMPOSITION (INCI Key Index)
MORUS ALBA ROOT EXTRACT	В
HYDROXYPROPYL CYCLODEXTRIN	В
STANDARD PACKAGE	0.5KG

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%		



The content of this document was established with utmost possible care. However, we reserve the right to add the information, to correct or to delete it without prior notice.

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