

# CHINPI EXTRACT K65B™

**NOF CORPORATION**  
Oleo & Speciality Chemicals Div.

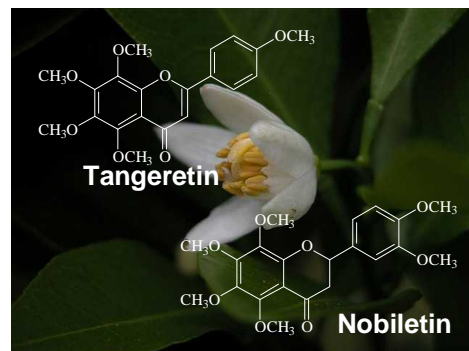
## Citrus tachibana peel extract for skin whitening

- *Citrus tachibana* peel extract can be utilized as an agent for the treatment of skin pigmentation such as spots and freckles induced by UV. Tachibana is the traditional orange plant in Japan. The peel is known as Chinese herb medicine 'Kippi'. It is prescribed for stomachic digester, antitussive agent and expectorant drug in Chinese herbal remedy, and also mixed in folk medicine for aromatic stomachic.



## 1 Characteristic

- **Inhibition of Melanin Formation**  
CHINPI EXTRACT K65B inhibits melanogenesis in HM3KO cultured human melanoma cells. The inhibitory mechanism involves suppression of the biosynthesis of tyrosinase.
- **Identification of whitening agents from Chinpi Extract**  
We attempted to purify effective skin-whitening agents from Citrus tachibana peel extract, and it was found that nobiletin and tangeretin, which belong to polymethoxyflavone, were identified as skin-whitening agents.
- **Photoprotective effect**  
CHINPI EXTRACT K65B provides protection against UVB induced cell damage.



## 2 Composition / Information / Specification

### Composition / Information

INCI Name	CAS No.	Content
CITRUS AURANTIUM TACHIBANA PEEL EXTRACT	1007871-75-1	1.6%
BUTYLENE GLYCOL	107-88-0	64.0%
WATER	7732-18-5	34.4%

### SAFETY DATA

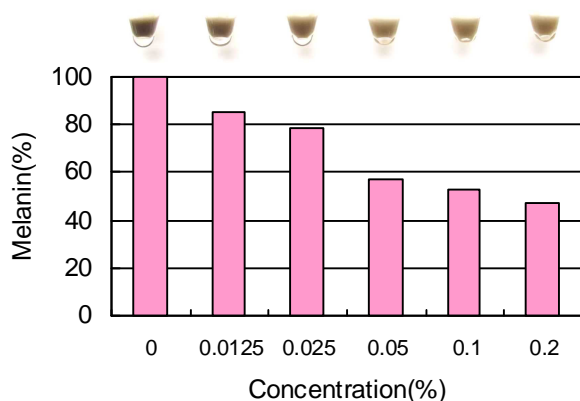
Acute oral toxicity, Primary skin irritation, Ocular irritation, Skin sensitization, Phototoxicity, Photosensitization, Cumulative application, Reverse mutation (Ames test), Human patch, Comedogenicity assay

### Specification

Item	Specification
Appearance	Light yellow to yellow-brown liquid
Odor	Faint characteristic odor
Identification (Flavonoids)	Positive
Purity (1) Heavy metals	Max. 20 ppm
Purity (2) Arsenic	Max. 2 ppm
Residue on evaporation	0.8 – 2.5 w/v%

## 3 Functional Data

### 1. Inhibitory effect on melanogenesis



### 2. Photoprotective effect

