Technical Data Sheet

BETA - ARBUTIN

Origin

Arbutin is a glycosylated hydroquinone. The hydroquinone glucoside is a botanically derived compound found in certain plant species, such as bearberry, cranberries, blueberries, wheat, pears and the fresh fruit of the California buckeye, Aesculus californica.

INCI name

Beta-Arbutin

Registrations

CASR-NO: 497-76-7
ELINCS No: 207-850-3

Chemical structure & Chemical Formula: \( \text{C}_{12}\text{H}_{16}\text{O}_7 \)

Specifications

Appearance: White crystals or crystalline powder
Assay (%): 99.7
Loss on drying (%): \( \leq 0.5 \)
Ignition residue (%): \( \leq 0.5 \)
pH value (1% solution): 5.0 - 7.0
Melting Point: 198.5 - 201.5°C
Arsenic: \( \leq 2 \text{ ppm} \)
Heavy Metals: \( \leq 10 \text{ ppm} \)
Hydroquinone: \( \leq 10 \text{ ppm} \)
FUNCTIONS
- Arbutin protects the skin from damages caused by free radicals.
- Arbutin is a skin whitening agent which eliminates the formation of melanin pigment by inhibiting Tyrosinase activity.
- Arbutin gives main properties: whitening effects, to treat sunburn marks and to regulate melanogenesis, anti-aging effect and UVB/UVC filter.
- In herbal medicines, Arbutin was used as an anti-inflammatory and antibacterial agent...

Applications
All degrees of skin brightening

Recommended Dosage: 0.5 - 3%

Storage
Protected from light and humidity in a clean place at room temperature. Once open, handle with care to avoid secondary microbial contamination.