

CORK



This product is the dried bark of *Phellodendron chinense* Schneid., a plant of the Rutaceae family. It is commonly known as "Sichuan Huangbai". After peeling the bark, remove the rough skin and dry it in the sun.

【 PROPERTIES 】

This product is in the form of plates or shallow grooves, with different lengths and widths, and a thickness of 1~6mm. The outer surface is yellow-brown or yellow-brown, flat or with longitudinal grooves, and some have visible lenticel marks and residual gray-brown rough skin; the inner surface is dark yellow or light brown, with fine longitudinal ridges. It is light, hard, fibrous in cross section, flaky and layered, and dark yellow. It has a slight odor and tastes very bitter. It is sticky when chewed.

【 IDENTIFICATION 】

(1) The powder of this product is bright yellow. The fibers are bright yellow, 16~38 μ m in diameter, often in bundles, and the surrounding cells contain calcium oxalate crystals to form crystal fibers; the walls of the crystal-containing cells are lignified and thickened. The stone cells are bright yellow, round or spindle-shaped, 35~128 μ m in diameter, and some are branched, with sharp branch ends, thick walls, and obvious stratification; some have large fibrous stone cells, up to 900 μ m in length. There are many calcium oxalate crystals.

(2) Take 0.2g of the powder of this product, add 40ml of 1% acetic acid methanol solution, ultrasonically treat at 60°C for 20 minutes, filter, and concentrate the filtrate to 2ml as the test solution. Take another 0.1g of *Phellodendron chinense* reference medicinal material, add 20ml of 1% acetic acid methanol, and prepare the reference medicinal material solution in the same way. Take the hydrochloric acid *Phellodendron chinense* reference substance, add methanol to prepare a solution containing 0.5mg per 1ml, as the reference substance solution. According to the thin layer chromatography method (General Rule 0502), take 3~5 μ l of each of the above three solutions, and spot them on the same silica gel G thin layer plate, use the lower layer solution of chloroform-methanol-water (30:15:4) as the developing agent, place it in a developing cylinder saturated with ammonia vapor, develop, take out, dry, and spray with dilute potassium iodide test solution. In the chromatogram of the test product, spots of the same color appear at the corresponding positions of the chromatogram of the reference medicinal material and the chromatogram of the reference substance.

【 INSPECTION 】

Water content shall not exceed 12.0% (General Rule 0832, second method).

Total ash content shall not exceed 8.0% (General Rule 2302).

【EXTRACT】

Determine by cold leaching method under the alcohol-soluble extract determination method (General Rule 2201), using dilute ethanol as solvent, and shall not be less than 14.0%.

【CONTENT DETERMINATION】

Determine by high performance liquid chromatography (General Rule 0512).

Chromatographic conditions and system suitability test: Octadecylsilane bonded silica gel is used as filler; ethyl acetate-0.1% phosphoric acid solution (50:50) (0.1 g sodium dodecyl sulfonate is added per 100 ml) is used as mobile phase; detection wavelength is 265 nm, and the number of theoretical plates calculated based on the hydrochloric acid peak should not be less than 4000.

Preparation of reference solution: Take an appropriate amount of hydrochloric acid reference substance, accurately weigh it, and add the mobile phase to make a solution containing 0.1 mg per 1 ml. Preparation of test solution Take about 0.1g of the powder of this product (passed through No. 3 sieve), weigh accurately, place in a 100ml volumetric flask, add 80ml of mobile phase, ultrasonically treat (power 250W, frequency 40kHz) for 40 minutes, cool, dilute to scale with mobile phase, shake well, filter, and take the filtrate. Determination method Accurately aspirate 5R of the reference solution and 5~20 hours of the test solution respectively and inject them into the liquid chromatograph for determination. This product is calculated on the basis of dry product, and the content of phellodendron alkaloid in terms of phellodendron alkaloid hydrochloride ($C_{20}H_{17}NO_4 \cdot HCl$) shall not be less than 30%.

Phellodendron alkaloid is determined according to high performance liquid chromatography (General Rule 0512).

Chromatographic conditions and system suitability test Octadecylsilane bonded silica gel was used as filler; acetonitrile-0.1% phosphoric acid solution (0.2g of sodium dodecylsulfonate was added per 100ml) (36:64) was used as mobile phase; the detection wavelength was 284nm. The number of theoretical plates calculated based on the hydrochloride phellodendron peak should not be less than 6000.

Preparation of reference solution Take an appropriate amount of hydrochloride phellodendron reference, accurately weigh it, add mobile phase to make a solution containing 0.1mg per 1ml, and obtain it.

Preparation of test solution Take about 0.5g of the powder of this product (passed through a No. 4 sieve), accurately weigh it, place it in a stoppered conical flask, accurately add 25ml of mobile phase, weigh it, ultrasonically treat it (power 250W, frequency 40kHz) for 30 minutes, let it cool, weigh it again, make up the lost weight with mobile phase, shake it well, filter it, and take the filtrate to obtain it.

Determination method: Accurately pipette 5 ml of reference solution and test solution respectively, inject into liquid chromatograph, and determine.

This product contains phellodendron hydrochloride (HCl) calculated as dry product, which shall not be less than 0.34%.

DECOCTION PIECE



【 PROCESSING 】

Phellodendron removes impurities, sprays with water, moistens thoroughly, cuts into strips, and dries.

【 PROPERTIES 】

This product is in the form of silk strips. The outer surface is yellow-brown or yellow-brown. The inner surface is dark yellow or light brown with longitudinal ridges. The cut surface is fibrous, flaky and layered, dark yellow. It tastes very bitter.

【 IDENTIFICATION 】 【 INSPECTION 】 【 CONTENT DETERMINATION 】

Same as medicinal material.

Salted phellodendron Take phellodendron silk and fry it dry according to the salt water roasting method (General Rule 0213).

【 PROPERTIES 】

This product is shaped like phellodendron silk, with a dark yellow surface and occasional burnt spots. It tastes very bitter and slightly salty.



【 IDENTIFICATION 】 【 INSPECTION 】 【 CONTENT DETERMINATION 】

Same as medicinal material. Huangbai charcoal Take Huangbai silk and stir-fry it according to the charcoal method (General Rule 0213) until the surface is burnt black.

【 PROPERTIES 】

This product is shaped like Huangbai silk, with a burnt black surface and dark brown or brown-black inside. It is light, brittle and easy to break. It tastes bitter and astringent.

【 PROPERTIES AND MERIDIANS 】

Bitter, cold. It enters the kidney and bladder meridians.

【 FUNCTIONS AND INDICATIONS 】

Clears heat and dries dampness, purges fire and removes steaming, detoxifies and treats sores. It is used for damp-heat diarrhea, jaundice and red urine, vaginal itching, hot stranguria and pain, beriberi, bone steaming and fatigue fever, night sweats, spermatorrhea, sores, swelling and poison, eczema and wet sores. Salt Huangbai nourishes yin and reduces fire. It is used for yin deficiency and excessive fire, night sweats and bone steaming.

【 USAGE AND DOSAGE 】

Appropriate amount for external use for 3~12g.

【 STORAGE 】

Place in a ventilated and dry place, moisture-proof.

