

Xinqingning Tablets (*Tabellae Rhei Preparata*) – 新清宁片

Sample source

Commercially available Xinqingning Tablets

Chemical reference substances

1. Chrysophanol, 2. Emodin
(National Institute for the Control of Pharmaceutical and Biological Products, Batch number: 1.0796-200309, 2. 0756-200210)

Preparation of test solution

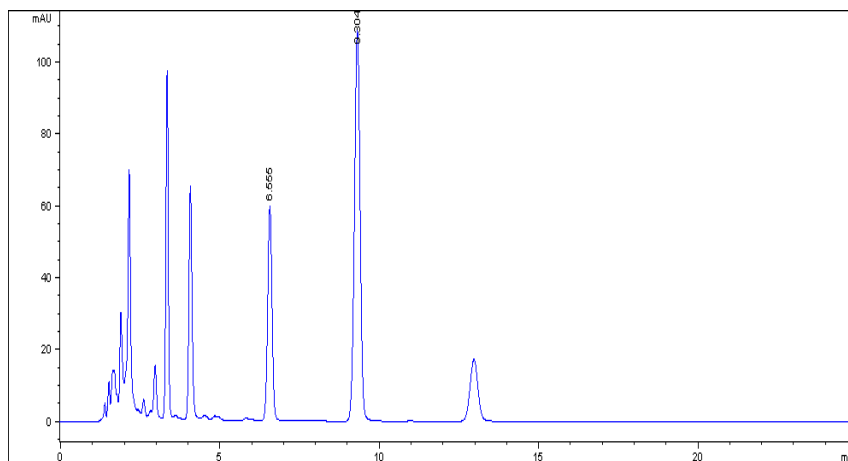
Accurately weight 20 tablets, remove the coatings and grind to a fine powder. Accurately weigh 0.1 g of the powder in a stoppered conical flask, accurately add 50 mL of methanol, stopper tightly and weigh. Heat under reflux for 1.5 hours, cool, weigh again, replenish the lost weight with methanol, mix well and filter. Accurately measure 25 mL of the filtrate, evaporate the filtrate to dryness, dissolve the residue in 27 mL of hydrochloric acid solution (2:27), add 20 mL of chloroform, heat under reflux for 30 minutes, cool immediately, transfer to a separating funnel, wash the container with a quantity of chloroform, combine the washings in the separating funnel, separate the chloroform layer, extract the water solution with one 15 mL and two 10 mL quantities of chloroform, combine the chloroform extracts, add a quantity of anhydrous sodium sulfate. Evaporate the chloroform extracts to dryness, dissolve the residue in 2 mL of ethyl acetate, and transfer to a 10 mL volumetric flask, add methanol to volume, mix well, and filter, use the filtrate as the test solution.

Chromatographic conditions

- Column: ZORBAX SB C18 4.6×150 mm, 5 µm (883975-902)
- Column temperature: 25 °C
- Mobile phase: acetonitrile-methanol-0.1 % phosphoric acid (35:37:28)
- Detector wavelength: 254 nm
- Flow rate: 1.0 mL/min
- Injection volume: 5 µL

Chromatographic system

- Agilent 1200 Series quaternary pump with vacuum degasser
- Agilent 1200 Series high-performance autosampler
- Agilent 1200 Series thermostated column compartment
- Agilent 1200 Series diode-array detector
- System control through Agilent ChemStation revision B.01.01



Components	k'	Ret Time (min)	Height (mAU)	Area (mAU's)	n	USP T _r
Emodin	4.462	6.555	59.70	561.8	11585	1.00
Chrysophanol	6.753	9.304	108.71	1331.5	13762	0.98