

## STANDARD TEST PROCEDURE

### IDENTIFICATION :

The retention time of the artemisinin peak in the chromatogram of the assay preparation corresponds to that of the artemisinin peak in the chromatogram of the Standard preparation as obtained in assay.

### ASSAY (artemisinin CONTENT):

By high performance liquid chromatography.

PRODUCT	artemisinin	GRADE	In-house
DOCUMENT NO.	GU/AN/1008	DATE OF ISSUE	30. 10. 2004
PROVIDER	XI'AN GUANYU BIO-TECH CO. LTD.	PAGE No.	02

### Chromatographic Conditions:

Instrument : Shimadzu LC-9A Pumps, SPD 6A UV Detector  
SIL 6B Auto Injector and CR 7A Data Processor

Column : Agilent, C18 , 5µm, 150x4.6mm

Mobile phase : CH<sub>3</sub>CN: Water (65:35)

Flow rate : 1.0 ml/minute

Detector : UV-205 nm

Injection volume : 10 microliters

### Standard preparation:

Weigh accurately about 5 mg of artemisinin Working Standard (W1) in 25ml volumetric flask, dissolve and make up the volume with methanol.

### Sample preparation:

Weigh accurately 5mg(W2) of test sample and Transfer the sample to previously dried 25ml volumetric flask, add methanol to dissolve then make up the volume with methanol.

### Procedure:

Separately inject equal volume (20 µl) of the standard preparation and the test preparation into chromatogram in the triplicate and note down the area counts of artemisinin peak calculate the percentage of artemisinin.

### Calculation:

$$\text{artemisinin (\%w/w)} = \frac{A_t}{A_s} \times \frac{W_2}{W_1} \times 100\%$$

Where,  $A_s$  and  $A_t$  are the counts of artemisinin peak in the chromatograms of the test preparation and standard preparation respectively.  $W_1$  and  $W_2$  are the weights of artemisinin in standard and test sample respectively.

$A_t$  and  $A_s$  are the counts of artemisinin peak in the chromatograms of the test preparation and standard preparation respectively.  $W_1$  is the contents of artemisinin in standard.