

## 天津天药药业股份有限公司

TIANJIN TIANYAO PHARMACEUTICALS CO., LTD.

lote: 0111214

## CERTIFICATE OF ANALYSIS

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Product	Spironolactone	Manufacturing date	2014.02.11
Batch No.	ELN 140201	Report date	2014.02.24
Test criteria	Current EP	Retest date	2016.02.11
	Specifications		Result
Appearance	A white or yellowish-white powder		White powder
Identification	A(IR)		Positive
Specific optical rotation	-41° ~ -46°		-41°
	(on the dried substance)		0.05%
Related substances	Total impurities ≤ 0.7%		<0.05%
	Impurity A ≤ 0.1%		<0.05%
	Impurity C≤ 0.1%		<0.05%
	Impurity D≤ 0.1%		<0.05%
	Impurity E≤ 0.1%		<0.05%
	Impurity F≤ 0.3%		<0.05%
	Impurity I≤ 0.1%		
	Each unspecified impurity ≤ 0.10%		Max: 0.05%
Free thiol compounds	A blue colour develops.		Conforms
Chromium	≤ 50 ppm		Conforms
Loss on drying	≤ 0.5%		0.26%
Sulfated ash	≤ 0.1%		Conforms
Assay*	97.5% ~ 102.0% (Calculated on the dried basis)		99.5%
Residual solvents	Ethyl acetate ≤ 5000 ppm  Methanol ≤ 3000 ppm  Thioacetic acid ≤ 100 ppm		ND 48ppm 54ppm
Batch size	212 kg		
Quantity	5 kg		
Conclusion	The above product conforms to current EP		
CONGRESION	Land Committee		

<sup>\*</sup>Storage conditions: Kept in an airtight container and protected from light.

Checked by: 3/037 2-14.12.4

Approved by: 资轨净 2014.12.4



<sup>\*</sup>Calculated on the dried basis