


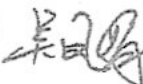
Kalchem International

Chemicals & Compounding Supplies

Certificate of Analysis

Product name:	Dehydroepiandrosterone (DHEA)	Batch No.:	C04-141003 (M)
Quantity:	200kg	Packaging:	10kg/carton
Manuf. date:	Sep. 27, 2014	Test date:	Oct. 22, 2014
Re-test date:	Sep. 26, 2017	Report date:	Nov. 06, 2014
Standard:	Export criterion	Made in China	
Items	Specifications	Results	Test methods
1. Appearance:	White or almost white crystalline powder	White crystalline powder	Visual
2. Assay (HPLC):	98.5% to 102.0%	99.7%	SOP-QC-C04-01
3. Melting range:	149°C to 151°C	149°C to 151°C	USP35<741>
4. Specific rotation:	+ 12° to + 15°	+ 13°	USP35<781S>
5. Loss on drying:	0.50% Max.	0.17%	USP35<731>
6. Sulphated ash:	0.1% Max.	0.05%	USP35<281>
7. Related substances:	Any impurity: 0.10% max. Total impurities: 0.50% max.	Not detected Not detected	SOP-QC-C04-01
8. Heavy metals (Pb):	10ppm Max.	<10ppm	USP35<231>
9. Total plate count:	1000cfu/g Max.	<10cfu/g	Ch.P.2010part II App. XI J
10. Yeast & Mold:	100cfu/g Max.	<10cfu/g	Ch.P.2010part II App. XI J
11. E.coli:	Negative	Negative	Ch.P.2010part II App. XI J
12. Salmonella:	Negative	Negative	Ch.P.2010part II App. XI J
13. Staphylococcus Aureus:	Negative	Negative	Ch.P.2010part II App. XI J
14. Bulk density:	0.40~0.55g/ml	0.4014g/ml	SOP-QC-TZ-39
15. Particle size:	100% through 40mesh; 40%~60% through 80mesh; ≤20% through 200mesh	100% through 40mesh 48% through 80mesh 0.3% through 200mesh	Ch.P.2010part II App. IX E
16. Residual solvents:	Methanol: 1500ppm Max. Ethanol: 2000ppm Max. Toluene: 890ppm Max. Pyridine: 50ppm Max.	104ppm Not detected Not detected Not detected	SOP-QC-C04-01
Conclusion: The above product conforms to Export criterion.			

QA Manager: 

Reported by: 

Kalchem International, Inc
224 South Main Street - Lindsay, OK 73052
Toll Free 888-298-9905 | FAX: 405-756-2373