

**WELGREEN TECHNOLOGY CO.,LTD**

605, Building B, Oak Blocks No.36 Fenghui South Road, Xi'an, China 710065

Tel: 86-29-88453375 Fax: 86-29-88352329

E-mail: wgt@allwellcn.com

**CERTIFICATE OF ANALYSIS**

Product Name	D-Biotin	Batch No.	180820
Package	20KG/Drum	Product Date	Aug.20,2018
Quantity	650kgs	Expiry Date	Aug.19,2021
Test Standard	USP 40		
Items & Results			
Item	Spec.	Result	
Description	White or white like crystalline powder	white crystalline powder	
Identification			
IR	Match with the Reference IR Spectrum	Conforms	
Specific Rotation	+89°~ +93°	+91.0°	
Solution color and clarity	Should clarity and the samples should be light in color standard	Conforms	
Loss on drying	≤0.2%, in-house	0.09%	
Ash	≤0.1% in-house	0.05%	
Residual solvents			
Benzene	≤2ppm, in-house	Conforms	
Toluene	≤100ppm, in-house	Conforms	
DMSO	≤5000ppm, in-house	Conforms	
Assay	98.5% ~ 100.5%	99.91%	
Related Substances			
Single impurities	≤1.0%	<0.3%	
Total impurities	≤2.0%	<0.3%	
Heavy metals	≤10ppm	<10ppm	
Pb	≤2ppm	<2ppm	
As	≤1ppm	<1ppm	
Microbial test			
Total viable aerobic count	≤1000cfu/g, in house	< 10cfu/g	
Total yeasts and moulds count	≤100cfu/g, in house	< 10cfu/g	
Escherichia coli	N.D./25g, in house	Not Detected	
Staphylococcus aureus	N.D./25g, in house	Not Detected	
Pseudomonas aeruginosa	N.D./25g, in house	Not Detected	
Enterobacteria	N.D./25g, in house	Not Detected	
Salmonella species	N.D./25g, in house	Not Detected	
Conclusion	Conform to USP40		
Analyst	Ma Liang	Review	Liu Aiqin
		Supervisor of QC	Li Min

