



CERTIFICATE OF ANALYSIS

Product	D-Calcium Pantothenate				
Batch No.	210318	Batch Quantity	1000KG		
Manufacture Date	2021/03/18	Expiry Date	2023/03/17		
Items & Result					
Item	Spec.		Result		
Assay(HPLC)	98.0%-102.0%		98.1%		
Physical control					
Appearance	White powder		Conforms		
Loss on drying	≤5.0%		3.7%		
Identification					
A: Infrared Absorption<197K> B: A solution (1 in 20) responds to the tests for Calcium	Concordant with the reference spectrum Conform to USP40		Conforms		
Specific optical rotation	+25° ~+27.5°		+26.9°		
Alkalinity	No pink color is produced within 5 seconds		Conforms		
Content of calcium	8.2~8.6%		8.33%		
Heavy metals(colorimetry)	Not more than 20ppm		Conforms		
Ordinary impurities(TLC)	≤1%		Conforms		
Methanol residue(GC)	Meet the requirements		Conforms		
Total plate count	<1000cfu/g		Conforms		
Mold and Yeast	<100cfu/g		Conforms		
Conclusion: : The product is conform to USP40.					
Storage: Cool & dry place. Keep away from strong light and heat.					
Shelf Life	2 years when properly stored				
Analyst	马亮	Review	刘爱琴	Supervisor of QC	李敏