



## CERTIFICATE OF ANALYSIS

Product Name: D-Calcium Pantothenate      Standard: USP40  
Batch Number: 20230812      Batch Quantity: 1000KG  
Manufacture Date: 2023-08-12      Expiry Date: 2023-08-11

ITEMS	SPECIFICATION	RESULTS
Appearance	White to off-white fine powder	Conform
Assay(HPLC)	98.0%~102.0%	99.3%
Content of calcium	8.2%~8.6%	8.4%
Infrared Identification	A: Infrared absorption (197k) B: A solution (1in 20) responds to the tests for calcium	Conform Conform
Calcium salt identification	Positive response	Conform
Specific optical rotation	+25.0 °~ +27.5 °	+26.45 °
Alkalinity	No pink color is produced within 5 seconds	Conform
Loss on drying	5.0% Max	4.5%
Heavy metals	20ppm Max	<20
Carbinol	0.3% Max	<0.3%
Aminopropanoic acid	1.0% Max	Conform
Total plate count	1000cfu/g Max	Conforms
Molds and Yeast	100cfu/g Max	Conforms
E.coli	Negative	Conforms
Salmonella	Negative	Conforms
<b>Conclusion</b>	The product conforms to standard of USP40.	
<b>Storage</b>	Store in cool & dry place, keep away from strong light and heat.	

Shawn  
Analyst

Rick  
Approved

Whip  
Header of QC