BaseBulk

CERTIFICATE OF ANALYSIS

Product Name:	D-Calcium Pantothenate
Batch Number:	CA2401040
Manufacture Date:	2024-01-22
Expiry Date:	2027-01-21
Analysis Date:	2024-01-24
Executive Standard:	BP2019 / USP2021

Physical & Chemical Characteristics

Analysis Item	Specification		Result	
Executive Standard	BP2019	USP2021	BP2019	USP2021
Appearance	White or almost white powder	White or almost white powder	White powder	White powder
Solubility	-	Freely soluble in water,soluble in glycerin,practically insoluble in alcohol,in chloroform ,and ether	-	Conform
Identification of Cupric sulfate*	Blue	-	Conform	-
Identification of Calcium*	The layer is chloroform and the chloroform layer is red	White precipitate, insoluble in glacial acetic acid, soluble in hydrochloric acid	Conform	Conform
Identification (TLC)	Comply with the standard	-	Complies	-

Infrared Identification*		Conform to standard spectrum		Conform
Specific Rotation	+25.5 to +27.5	+25.0 to +27.5	+26.7	+26.7
Assay	98.0 – 101.0%	98.0 – 102.0%	100.5%	101.1%
pH (5% solution)	6.8 – 8.0	-	7.1	-
Clarity and Color	Clear colorless	-	Clear colorless	-
Related substances (β-Alanine)	≤0.5%	-	<0.5%	-
Loss on Drying	≤3.0%	≤5.0%	2.1%	2.1%
Calcium content	-	8.2% – 8.6%	-	8.4%
Chlorides	≤0.02	-	≤0.02	-

Heavy Metals

Analysis Item	Specification		Result	
Executive Standard	BP2019	USP2021	BP2019	USP2021
Lead* (Pb)	≤2.0 ppm	≤2.0 ppm	<0.05 ppm	<0.05 ppm
Arsenic* (As)	≤1.0 ppm	≤1.0 ppm	0.0503 ppm	0.0503 ppm
Cadmium * (Cd)	≤1.0 ppm	≤1.0 ppm	<0.01 ppm	<0.01 ppm
Mercury * (Hg)	≤0.1 ppm	≤0.1 ppm	<0.01 ppm	<0.01 ppm

Microbiological Tests

Analysis Item	Specification		Result	
Executive Standard	BP2019	USP2021	BP2019	USP2021
Total Plate Count*	≤10^3 CFU/g	≤10^3 CFU/g	<10 CFU/g	<10 CFU/g
Yeast & Mold*	≤10^2 CFU/g	≤10^2 CFU/g	<10 CFU/g	<10 CFU/g
E. coli*	Negative	Negative	Negative	Negative
Salmonella*	Negative (25g)	Negative (25g)	Negative	Negative

Complies with the requirements of BP2019 / USP2021.