

Certificate of Analysis**QUALITY CONTROL LABORATORY ANALYTICAL REPORT**Date: Nov. 30, 2024Product: Bromelain 2400 GDU PowderBotanical Source: Ananas ComosusLot No.: R2411919Manufacture Date: Nov. 15, 2024

Active Ingredients	*Base on Input	per unit	Result
Bromelain 2400 GDU Powder		NLT 2400GDU/gm	2467 GDU/gm

Chemical /Physical Analysis

ITEM	SPECIFICATION	RESULT	METHODS
Appearance	Off White to Cream powder	Complies	Visual
Loss on Drying	NMT 7.00%	3.51%	USP <731>
Solubility in Water	Almost soluble	Complies	USP
Heavy Metals	NMT 10 ppm	Complies	USP <231>
Lead (Pb)	NMT 1 ppm	Complies	ICP-MS
Arsenic (As)	NMT 3 ppm	Complies	ICP-MS
Cadmium (Cd)	NMT 1 ppm	Complies	ICP-MS
Mercury (Hg)	NMT 0.5 ppm	Complies	ICP-MS

Microbiological Analysis

ITEM	SPECIFICATION	RESULT	METHODS
Total Aerobic Count	< 10000 cfu/g	10 cfu/g	USP <2021>
Total Combined Mold and Yeasts Count	< 1000 cfu/g	10 cfu/g	USP <2021>
E. coli	Negative	Negative	USP <2022>
Salmonella spp.	Negative	Negative	USP <2022>
Staphylococcus aureus	Negative	Negative	USP <2022>
Pseudomonas aeruginosa	Negative	Negative	USP <62>



Quality Control

11/30/2024

Date

Certificate of Analysis

QUALITY CONTROL LABORATORY ANALYTICAL REPORT

Date: Jul. 30, 2024 Product: Bromelain 2400 GDU Powder
Botanical Source: Ananas Comosus Lot No.: R2407019 Manufacture Date: July. 15, 2024

Active Ingredients	*Base on Input	per unit	Result
Bromelain 2400 GDU Powder		NLT 2400GDU/gm	2459 GDU/gm

Chemical /Physical Analysis

ITEM	SPECIFICATION	RESULT	METHODS
Appearance	Off White to Cream powder	Complies	Visual
Loss on Drying	NMT 7.00%	3.51%	USP <731>
Solubility in Water	Almost soluble	Complies	USP
Heavy Metals	NMT 10 ppm	Complies	USP <231>
Lead (Pb)	NMT 1 ppm	Complies	ICP-MS
Arsenic (As)	NMT 3 ppm	Complies	ICP-MS
Cadmium (Cd)	NMT 1 ppm	Complies	ICP-MS
Mercury (Hg)	NMT 0.5 ppm	Complies	ICP-MS

Microbiological Analysis

ITEM	SPECIFICATION	RESULT	METHODS
Total Aerobic Count	< 10000 cfu/g	10 cfu/g	USP <2021>
Total Combined Mold and Yeasts Count	< 1000 cfu/g	10 cfu/g	USP <2021>
E. coli	Negative	Negative	USP <2022>
Salmonella spp.	Negative	Negative	USP <2022>
Staphylococcus aureus	Negative	Negative	USP <2022>
Pseudomonas aeruginosa	Negative	Negative	USP <62>



Quality Control

07/30/2024

Date