Eurofins Microbiology Lab Madison

Rad One LTD

Claudia Armstead
32 Barnmead
Haywards, UNITED KINGDOM RH16 1UZ

ANALYTICAL REPORT

AR-23-JL-059072-01

Client Code: JL0000651
PO#: PO-0255/PO-0260_Glucosamine

Received On: 08Nov2023
Reported On: 21Nov2023

Eurofins Sample Code:	990-2023-11080162	**Sample Registration Date:**	08Nov2023
Client Sample Code:	EX100328AA	**Condition Upon Receipt:**	acceptable, 21.1°C
Sample Description:	Glucosamine	**Sample Reference:**	

FS014 - Heavy Metals USP 233	Reference	Accreditation	Completed	Sub
	USP 233 Mod.		17Nov2023	1

Parameter	Result
Arsenic	<10.0 ppb
Cadmium	30.6 ppb
Lead	735 ppb
Mercury	<5.00 ppb

FS034 - Methylsulfonylmethane	Reference	Accreditation	Completed	Sub
	Current USP pg. 7104 (mod.)		17Nov2023	1

Parameter	Result
Methylsulfonylmethane (MSM)	9,710 ppm

FS05M - Organoleptic Evaluation	Reference	Accreditation	Completed	Sub
	Internal Method based on USP 25th ed. pg 2363		17Nov2023	1

Parameter	Result
Appearance	Clear capsule with yellow powder inside
Characteristic Odor	Characteristic of spice
Package Appearance	Black plastic commercial bottle

FS09H - Methionine	Reference	Accreditation	Completed	Sub
	Agilent Publication, 2000. (Modified)		17Nov2023	1

Parameter	Result
Methionine	8.64 mg/g

FS0CT - Glucosamine Sulfate	Reference	Accreditation	Completed	Sub
	AOAC 2005.01 mod.		17Nov2023	1

Parameter	Result
Glucosamine Sulfate	585,000 ppm

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M902A - Content of Chondroitin Sulfate Sodium by CPC Titration	**Reference** Current USP/NF	**Accreditation**	**Completed** 21Nov2023	**Sub** 2
Parameter	**Result**			
Chondroitin Sulfate Sodium Salt	60.5 mg/g			

M9059 - Quercetin	**Reference** Internal method	**Accreditation**	**Completed** 21Nov2023	**Sub** 2
Parameter	**Result**			
Quercetin	8,150 µg/g			

ZMCKU - E. coli - USP <2022>	**Reference** USP <2022>	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 11Nov2023
Parameter	**Result**		
E. coli	Not Detected per 10 g		

ZMDFJ - Total Combined Yeasts/Moulds Count - USP Chapter <2021>	**Reference** U.S. Pharmacopeia Chapter 2021	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 14Nov2023
Parameter	**Result**		
Total Combined Yeasts/Moulds Count	< 100 cfu/g		

ZMDFK - Total Aerobic Microbial Count - USP Chapter <2021>	**Reference** U.S. Pharmacopeia Chapter 2021	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 11Nov2023
Parameter	**Result**		
Total Aerobic Microbial Count	400 (est) cfu/g		

ZMDGE - Staphylococcus aureus - USP Chapter <2022>	**Reference** U.S. Pharmacopeia Chapter 2022	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 10Nov2023
Parameter	**Result**		
Staphylococcus aureus	Not Detected per g		

ZMDHV - Pseudomonas aeruginosa - USP Chapter <62>	**Reference** U.S. Pharmacopeia Chapter 62	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 10Nov2023
Parameter	**Result**		
Pseudomonas aeruginosa	Not Detected per g		

ZME88 - Bile-Tolerant Gram Negative Bacteria (Semiquanti) - USP Chapter <2021>	**Reference** U.S. Pharmacopeia Chapter 2021	**Accreditation** ISO/IEC 17025:2017 A2LA 2918.05	**Completed** 11Nov2023

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ZME88 - Bile-Tolerant Gram Negative Bacteria (Semiquanti) - USP Chapter <2021>	**Reference**	**Accreditation**	**Completed**
	U.S. Pharmacopeia Chapter 2021	ISO/IEC 17025:2017 A2LA 2918.05	11Nov2023

Parameter	**Result**
Bile-Tolerant Gram Negative Bacteria (Semiquanti)	<10 MPN per g

ZMEV2 - Salmonella - USP Chapter <2022>	**Reference**	**Accreditation**	**Completed**
	U.S. Pharmacopeia Chapter 2022	ISO/IEC 17025:2017 A2LA 2918.05	11Nov2023

Parameter	**Result**
Salmonella spp.	Not Detected per 10 g

Subcontracting partners:

1 - Eurofins Food Chemistry Testing US Madison, WI
2 - Eurofins Botanical Testing US Brea, California

Respectfully Submitted,

Shannon Kelly
Snr Client Services Associate