

**Tirupati Lifesciences**

Nahan Road, Paonta Sahib, Dist. Sirmour, Himachal Pradesh - 173025, India

**QUALITY CONTROL DEPARTMENT
CERTIFICATE OF ANALYSIS - RAW MATERIAL**

Name of Material	: MICRONIZED L-THREONINE	Material Code	: 110000805
Batch No.	: 20241205	Protocol No.	: 1110/TDS/110000805-00
Manufacturer Name	: WUHAN AMINO ACID BIO-CHEMICAL CO.	Received Qty.	: 25 Kg
Supplier Name	: RAIVAT IMPEX PRIVATE LIMITED	GRN No.	: 5000051158
Received Date	: 14/04/2025	AR No.	: 1110PRM2501412
Manufacturer Date	: 05/12/2024	Exp. Date	: 04/12/2027
Sampled On	: 14/04/2025	Retest Due On	: N/A
Analysis completion date	: 22/04/2025	Sampled Qty.	: 0.080 Kg
Sampled By & Date	: Irshad Ahamad & 14/04/2025	Rejection Qty.	: 0.00 Kg
Sample Login By & Date	: Irshad Ahamad & 14/04/2025	Pass Qty.	: 24.92 Kg
Specification No.	: 1110/SPC/110000805-00	STP No.	: 1110/STP/110000805-00
GRN Date	: 08/04/2025	Test Result	: PASS
SAP Lot No.	: 10000116133		

RESULT OF ANALYSIS

S.No.	Test	Specifications	Results	Test Method
1	Description	White, odourless crystals having a slightly sweet taste.	White, odourless crystals having a slightly sweet taste.	1110/STP/110000805-00

Signatories	Prepared By (QC)	Checked By (QC)	Approved By (QC)
Name	Radhe Shyam	Manju Bala	Bharat Singh
Designation	OFFICER	SR. EXECUTIVE	DY. MANAGER
Date	22/04/2025	22/04/2025	22/04/2025

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Nahan Road, Paonta Sahib, Dist. Sirmour, Himachal Pradesh - 173025, India

QUALITY CONTROL DEPARTMENT

Name of Material : MICRONIZED L-THREONINE

Batch No. : 20241205

AR No. : 1110PRM2501412

S.No.	Test	Specifications	Results	Test Method
2	Solubility	Freely soluble in water, insoluble in absolute alcohol in ether and in chloroform.	Freely soluble in water, insoluble in absolute alcohol in ether and in chloroform.	1110/STP/110000805-00
3	Identification(By IR)	Compare the spectrum with the test specimen and the corresponding to USP Reference Standard.	Complies	1110/STP/110000805-00
4	pH	Between 5.0 to 6.5	6.19	1110/STP/110000805-00
5	Specific optical rotation	Between -26.7° to -29.1°	-28.243°	1110/STP/110000805-00
6	Loss on drying	Not more than 0.2 % w/w	0.10 % w/w	1110/STP/110000805-00
7	Residue on Ignition	Not more than 0.40 % w/w	0.20 % w/w	1110/STP/110000805-00
8	Chloride	Not more than 0.05 %	Less than 0.05 %	1110/STP/110000805-00
9	Sulfate	Not more than 0.03 %	Less than 0.03 %	1110/STP/110000805-00
10	Iron	Not more than 30 ppm	Less than 30 ppm	1110/STP/110000805-00
11	Assay(By Titration)	Between 98.5 % to 101.5 % (ODB)	100.1 %	1110/STP/110000805-00

Conclusion : The sample complies with respect to specification No: 1110/SPC/110000805-00

Remark :

***** End of Report *****

Signatories	Prepared By (QC)	Checked By (QC)	Approved By (QC)
Name	Radhe Shyam	Manju Bala	Bharat Singh
Designation	OFFICER	SR. EXECUTIVE	DY. MANAGER
Date	22/04/2025	22/04/2025	22/04/2025

QUALITY CONTROL DEPARTMENT
CERTIFICATE OF ANALYSIS - RAW MATERIAL

Name of Material	: TAURINE	Material Code	: 110001184
Batch No.	: C002-YB2401510	Protocol No.	: 1110/TDS/110001184-00
Manufacturer Name	: HUBEI GRAND LIFE SCIENCE & TECHNOLO	Received Qty.	: 100 Kg
Supplier Name	: NIKEON CORPORATION	GRN No.	: 5000001675
Received Date	: 11/05/2024	AR No.	: 1110PRM2400272
Manufacturer Date	: 24/01/2024	Retest Date	: 23/01/2027
Sampled On	: 11/05/2024	Retest Due On	: N/A
Analysis completion date	: 31/05/2024	Sampled Qty.	: 0.180 Kg
Sampled By & Date	: Amit Panwar & 11/05/2024	Rejection Qty.	: 0.00 Kg
Sample Login By & Date	: Amit Panwar & 11/05/2024	Pass Qty.	: 99.82 Kg
Specification No.	: 1110/SPC/110001184-00	STP No.	: 1110/STP/110001184-00
GRN Date	: 09/05/2024	Test Result	: PASS
SAP Lot No.	: 10000004853		

RESULT OF ANALYSIS

S.No.	Test	Specifications	Results	Test Method
1	Description	White crystals or crystalline powder	White crystalline powder	1110/STP/110001184-00
2	Identification			1110/STP/110001184-00
2. A	By IR	Compare the spectrum with the test specimen and the corresponding to reference standard.	Complies	1110/STP/110001184-00

Signatories	Prepared By (QC)	Checked By (QC)	Checked By (Micro) (Authorized Signatory)	Approved By (QC)
Name	Sonit Kumar	Manju Bala	Anurag	Phool Keshar
Designation	OFFICER	SR. EXECUTIVE	SR. EXECUTIVE	DY. MANAGER
Date	31/05/2024	31/05/2024	31/05/2024	31/05/2024

QUALITY CONTROL DEPARTMENT

Name of Material : TAURINE

Batch No. : C002-YB2401510

AR No. : 1110PRM2400272

S.No.	Test	Specifications	Results	Test Method
2. B	BY HPLC	The retention time of the major peak of the sample solution corresponds to that of the standard solution as obtained in the Assay.	Complies	1110/STP/110001184-00
3	Solubility	Soluble in water	Soluble in water	1110/STP/110001184-00
4	Loss on drying	Not more than 0.30% w/w	0.15 %w/w	1110/STP/110001184-00
5	Residue on Ignition	Not more than 0.30% w/w	0.10 %w/w	1110/STP/110001184-00
6	Assay	Between 98.0 % to 102.0 % C ₂ H ₇ NO ₃ S (ODB)	100.15% (oDB)	1110/STP/110001184-00
7	Chloride	Not more than 0.05%	Less than 0.05%	1110/STP/110001184-00
8	Sulphate	Not more than 0.03%	Less than 0.03%	1110/STP/110001184-00
9	Iron	Not more than 30 ppm	Less than 30 ppm	1110/STP/110001184-00
10	Related compounds#	Individual impurities : Not more than 0.5%	Complies (Refer AR. No TLS/RM0639/24)	1110/STP/110001184-00
11	Microbiological Test			1110/STP/110001184-00
11. A	Total aerobic plate count	Not more than 1000 cfu/g	90 cfu/g	1110/STP/110001184-00
11. B	Total Yeast & mold count	Not more than 100 cfu/g	<10 cfu/g	1110/STP/110001184-00
11. C	E. coli	Should be Absent/g	Absent/g	1110/STP/110001184-00
11. D	Salmonella	Should be Absent/10g	Absent/10g	1110/STP/110001184-00

Signatories	Prepared By (QC)	Checked By (QC)	Checked By (Micro) (Authorized Signatory)	Approved By (QC)
Name	Sonit Kumar	Manju Bala	Anurag	Phool Keshar
Designation	OFFICER	SR. EXECUTIVE	SR. EXECUTIVE	DY. MANAGER
Date	31/05/2024	31/05/2024	31/05/2024	31/05/2024

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QUALITY CONTROL DEPARTMENT

Name of Material : TAURINE

Batch No. : C002-YB2401510

AR No. : 1110PRM2400272

S.No.	Test	Specifications	Results	Test Method
11. E	S. aureus	Should be Absent/g	Absent/g	1110/STP/110001184-00
11. F	P. aeruginosa	Should be Absent/g	Absent/g	1110/STP/110001184-00
11. G	Shigella	Should be Absent/25g	Absent/25g	1110/STP/110001184-00
11. H	Bile-Tolerant Gram-Negative Bacteria	Should be Absent/g	Absent/g	1110/STP/110001184-00
11.	Additional Test			1110/STP/110001184-00
11. A	Bulk Density	To be reported	0.73 g/ml	1110/STP/110001184-00
11. B	Tapped Density	To be reported	0.87 g/ml	1110/STP/110001184-00

Conclusion : The sample complies with respect to specification No: 1110/SPC/110001184-00**Note :#** Related compounds test for vendor qiangiang pharmaceutical co. ltd. shall be performed once in a year for each consignment and material other vendor shall be performed for every consignment.

***** End of Report *****

Signatories	Prepared By (QC)	Checked By (QC)	Checked By (Micro) (Authorized Signatory)	Approved By (QC)
Name	Sonit Kumar	Manju Bala	Anurag	Phool Keshar
Designation	OFFICER	SR. EXECUTIVE	SR. EXECUTIVE	DY. MANAGER
Date	31/05/2024	31/05/2024	31/05/2024	31/05/2024