Customer:
Amino Club

EA Sample ID: 26EA1026-047
Sample Name: MOTS-C 40MG
Sample Type: Powder
Batch/Lot: MTC0004

Date Received:
10/26/2026
Date Completed:
11/09/2026

ETHOS ANALYTICS

CERTIFICATE OF ANALYSIS

Summary of Results

Analysis Type	Method	Date Tested	Status
MOTS-c	HPLC	10/27/2026	Pass
Bacterial Endotoxins	USP <85>	10/31/2026	Pass
Traditional Sterility	USP <71>	11/09/2026	Pass
Fentanyl	USP <2251>	10/27/2026	Pass
Residual Solvents	USP <467>	10/31/2026	Pass
Heavy Metals	ICP-MS	10/29/2026	Pass
Microbiological	Petrifilm/qPCR	10/30/2026	Pass



Label Claim Profile

Analyte	Result	Specification	LOD
MOTS-c	Vial 1 = 41.87mg/vial	40mg/vial	0.01%
MOTS-c	Vial 2 = 41.52mg/vial	40mg/vial	0.01%
MOTS-c	Vial 3 = 41.60mg/vial	40mg/vial	0.01%
Identity of the analyte was confirmed by retention time concordance with a certified reference standard, per USP <621>.			
Chromatographic Purity (3 Vials)	Vials 1,2,3 = >99%	>99%	0.01%
Bacterial Endotoxins (Gel-Clot: 1:10 Dilution)	<1.25 EU/ml	<5 EU/ml	λ = 0.125 EU/mL
Traditional 14-Day USP <71> Sterility (3 Vials)	Pass - Vials 1,2 3 = No Microbial Growth	No Microbial Growth	N/A
Fentanyl (3 Vials)	Vials 1,2,3 = Not Detected	<LOD	10ppm
Container Closure Integrity (Dye Ingress) USP <1207>	No dye ingress observed	No dye ingress	N/A
Solubility (Visual per USP General Notices 5.30)	Clear, colorless solution; fully dissolved	Freely soluble in Water; clear and free of visible particulates	N/A
Acetone	<LOD	<5000ppm	500ppm
Acetonitrile	<LOD	<410ppm	50ppm
Benzene	<LOD	<2ppm	0.1ppm
Chloroform	<LOD	<60ppm	5ppm
Cyclohexane	<LOD	<3880ppm	50ppm
Methanol	<LOD	<3000ppm	50ppm
DMF (N,N-Dimethylformamide)	<LOD	<880ppm	50ppm
Dichloromethane (Methylene Chloride)	<LOD	<600ppm	50ppm
Diethyl Ether (Ethyl Ether)	<LOD	<5000ppm	500ppm
Isopropanol (2-Propanol)	<LOD	<5000ppm	500ppm
Hexanes	<LOD	<290ppm	5ppm
Ethanol	<LOD	<5000ppm	500ppm
THF (Tetrahydrofuran)	<LOD	<720ppm	50ppm
TFA (Trifluoroacetic acid)	<LOD	Report Only	50ppm

NOTES: Lyophilized samples may include acceptable salts, sugars, or buffering agents added to improve solubility and stability. These excipients are non-chromophoric, typically not detected by HPLC, and are not considered impurities. Three vials were independently tested to evaluate batch consistency and vial-to-vial variability.

LOD = LIMIT OF DETECTION; LOQ = LIMIT OF QUANTIFICATION

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ISO/IEC 17025 Acc #: 117798

Noel Samsum
Laboratory Director
9-Nov-2026

The sample analyzed was inspected and is free from visual mold, mildew, and foreign matter. The testing procedures, equipment calibration, and maintenance are all in accordance with ISO/IEC 17025:2017 standards. The presented report is only applicable to the sample specified above and may not be applied to any similar or identical products. Reports are prohibited from being reproduced with alterations of any kind.

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Heavy Metal Analysis (USP <233>)

Analyte	Result (mcg/vial)	LOQ (ppm)	LOD (ppm)	Limit (mcg/g)	Pass/Fail
Arsenic	**<LOQ**	0.010	0.005	0.5	Pass
Cadmium	**<LOQ**	0.010	0.005	0.1	Pass
Lead	**<LOQ**	0.010	0.005	0.5	Pass
Mercury	**<LOQ**	0.010	0.005	0.1	Pass

Microbiological Analysis (USP <61>, USP <62>)

Microbe	Result	Limit	Pass/Fail
Total Aerobic Plate	**<10 CFU/g**	<100 CFU/g	Pass
Coliform	**<10 CFU/g**	<10 CFU/g	Pass
Bile-Tolerant Gram-Negative Bacteria	**<10 CFU/g**	<10 CFU/g	Pass
Yeast and Mold	**<10 CFU/g**	<10 CFU/g	Pass
Escherichia Coli	**Negative/1g**	Negative/1g	Pass
Salmonella	**Negative/1g**	Negative/1g	Pass
Staphylococcus Aureus	**Negative/1g**	Negative/1g	Pass

NOTES:

CFU = Colony Forming Unit
NS = Not Specified
NT = Not Tested

LOQ = Limit of Quantification
LOD = Limit of Detection

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