

CERTIFICATE OF ANALYSIS

Third-Party Verified | 21 CFR Part 111 Compliant

Product Identification

Product Name	Quercetin Nettle+ Tablets 60ct	Lot Number	0077455-015-M1018-071125-00020
Part Number	015-M1018	Formula ID	100-PR1146 (Rev. 28)
Manufacture Date	July 11, 2025	Dosage Form	Tablet (1 tablet/serving)
COA Issue Date	May 1, 2026	Tablet Weight	~959 mg

Independent Third-Party Raw Material Verification

KEY INGREDIENTS VERIFIED BY INDEPENDENT LABORATORY

Quercetin • Bromelain • Ascorbic Acid

All Raw Materials Confirmed Above Specification

Three key raw materials used in this batch were independently verified by **MS Bioanalytical, LLC** (Champaign, IL) via HPLC-UV and USP methods. Quercetin raw material potency was confirmed at **225% of specification** in a finished product manufactured from the same raw material lot. Bromelain activity confirmed at **2,468 GDU/g** (spec: >2,400 GDU/g). Ascorbic acid purity confirmed at **100%** (spec: 99%). MS Bioanalytical is an independent, ISO-accredited analytical laboratory with no financial relationship to Highland Laboratories.

Material Tested	Method	MSB Control #	Spec	Result	Status
Quercetin (RM Lot 300-0880A)	STM-3.4 (HPLC-UV)	08192025-002	265 mg/svg	596.8 mg/svg	PASS
Bromelain 2400 (RM 300-0151)	STM-8.8 (USP)	03112026-018	>2400 GDU/g	2468 GDU/g	PASS
Ascorbic Acid (RM 300-0075)	STM-1.11 (HPLC-UV)	04062026-019	99%	100%	PASS

Active Ingredient Verification (per tablet)

Active Ingredient	Method	Formula Spec	Result	Verification	Status
Quercetin (as Dihydrate)	QM-0507 + 3rd Party HPLC	392.2 mg	392.2 mg	RM Potency Confirmed	PASS
Vitamin C (Mag. Ascorbate + Ascorbic Acid)	QM-0507 + 3rd Party HPLC	146 mg	146 mg	RM Purity Confirmed	PASS
Pantothenic Acid (D-Cal. Pantothenate)	QM-0507 (By Input)	78.2 mg	78.2 mg	Formulation Verified	PASS
Bromelain (2400 GDU/g)	QM-0507 + 3rd Party USP	25 mg	25 mg	RM Activity Confirmed	PASS
Stinging Nettle Leaf (Freeze Dried)	QM-0507 (By Input)	33.4 mg	33.4 mg	Formulation Verified	PASS

Physical Testing

Test	Method	Specification	Result	Status
Disintegration Time	QM-0502 (USP <701>)	< 45 minutes	28 minutes	PASS
Tablet Appearance	QM-0506 (Visual)	Uniform, no defects	Conforms	PASS

Microbiological Testing

Test	Method	Specification	Result	Status
Total Aerobic Count	QM-0500	< 10,000 CFU/g	Not Detected	PASS
Yeast and Mold	QM-0500	< 1,000 CFU/g	Not Detected	PASS
Total Coliform	QM-0500	< 100 CFU/g	Not Detected	PASS
<i>E. coli</i>	QM-0500	Negative	Not Detected	PASS

Contaminant Testing (Heavy Metals)

Analyte	Method	Specification	Result	Status
Lead (Pb)	QM-0007 (ICP-MS)	< 10 mcg/serving	Not Detected	PASS
Mercury (Hg)	QM-0007 (ICP-MS)	< 3 mcg/serving	Not Detected	PASS
Arsenic (As)	QM-0007 (ICP-MS)	< 10 mcg/serving	Not Detected	PASS
Cadmium (Cd)	QM-0007 (ICP-MS)	< 4.1 mcg/serving	Not Detected	PASS

Manufacturing & Compliance Statement

This product was manufactured in a facility registered with the U.S. Food and Drug Administration and operates in full compliance with Current Good Manufacturing Practices (cGMP) for dietary supplements as specified under 21 CFR Part 111. All quality control testing, batch production records, and master manufacturing records are maintained in accordance with federal regulations. Key raw material potency and identity were independently verified by MS Bioanalytical, LLC, an independent third-party analytical laboratory with no ownership, financial, or contractual relationship to Highland Laboratories beyond the testing engagement.

Authorization & Digital Signatures

Role	Signed By	Date/Time (UTC)	Session ID
Prepared By (QC)	hld.jmateer	2026-05-01 20:52:35	34B8D608-42EFC3322AC9
Reviewed & Approved (QA)	Keith Gregory	2026-05-01 20:52:35	34B8D608-42EFC3322AC9
Third-Party Lab (RM Testing)	Quality Manager, MS Bioanalytical	Multiple dates	See RM verification table

Document Integrity

QC Order: PRD004001 | Lot Record ID: 1437195 | Test Rows: 16 | COA Type: Formulation Verified + Third-Party RM Testing
SHA-256: 42efc3322ac99b8d1bcf1ce7945efd6868cd70d477b6c76e288bf66ed89df068

This COA is generated from QC results in the Highland Laboratories SAP/BatchMaster ERP system. Active ingredient quantities are verified via formulation input records and supported by independent third-party raw material testing by MS Bioanalytical, LLC: Quercetin (MSB# 08192025-002), Bromelain (MSB# 03112026-018), Ascorbic Acid (MSB# 04062026-019). Digital signatures certify review and approval. Not to be reproduced in part without written approval. All testing per 21 CFR Part 111.