

## CERTIFICATE OF ANALYSIS

<b>Product</b>	Vitamin C- Organic	<b>Lot Number</b>	754542
<b>Item Number</b>	ORG0028	<b>Country of Origin</b>	USA

TEST	SPECIFICATION	RESULTS						METHOD
<i>Additives/Diluents</i>								
Isotope Testing	Report only	<sup>14</sup> C	± 1σ	δ <sup>13</sup> C	± 1σ	δD	± 1σ	Radiocarbon ( <sup>14</sup> C) and Stable Isotope Ratio (δ <sup>13</sup> C and δD) analysis
		13.49	0.08	-14.17	0.14	-41	1	
Analysis	<p><sup>14</sup>C is in disintegrations per minute per gram carbon (dpm/g C). (± 1σ) δ<sup>13</sup>C (<sup>13</sup>C/<sup>12</sup>C) is in parts per mil (‰) relative to the international standard PDB. (± 1σ) δD (D/H) is in parts per mil (‰) relative to the international standard V-SMOW. (± 1σ) Calculation of uncertainty provided upon request.</p> <p>The C<sup>14</sup> activity of Vitamin C- Organic is equivalent to 99% of the 2019 and present day <sup>14</sup>C reference activity 13.6 dpm/gC. This indicates no addition or dilution with fossil fuel derived materials.</p>							

TEST	SPECIFICATION	RESULTS	METHOD
<i>Identity</i>			
Appearance	Powder	Pass	WI-QC-017
Color	Cream to Creamy-Yellow	Pass	WI-QC-017
HPTLC	Must Conform To Target Species and Fruit Plant Parts	Pass	TLC

<i>Purity/ Lack of Contaminants</i>			
Total Aerobic Microbial Count	≤ 1 x 10 <sup>4</sup> (cfu/g)	Pass	USP <2021>
Total Combined Yeast and Mold Count	≤ 1 x 10 <sup>3</sup> (cfu/g)	Pass	USP <2021>
Enterobacterial Count (Bile-Tolerant Gram Neg. Bacteria)	≤ 1 x 10 <sup>2</sup> (cfu/g)	Pass	02-209-01
<i>Staphylococcus aureus</i>	None detected in 10 grams	Pass	USP <2022>
<i>Escherichia coli</i>	None detected in 10 grams	Pass	USP <2022>

P: (800)370-3447 | F: (512)341-3931 | W: www.qnlab.com

Salmonella spp.	None detected in 10 grams	Pass	USP <2022>
Lead (Pb)	≤ 3 ppm	Pass	USP 730
Arsenic (As)	≤ 1.5 ppm	Pass	USP 730
Cadmium (Cd)	≤ 1 ppm	Pass	USP 730
Mercury (Hg)	≤ 0.2 ppm	Pass	USP 730
Ash	≤ 12%	Pass	WC-Ash
Aflatoxins	Conforms to USP limits	Pass	USP <561>
Pesticides	Conforms to USP limits	Pass	USP <561>

Composition			
Bulk Density	Report Only	0.60 g/mL	WI-QC-007
Particle Size Distribution	Report Only	Mesh #	Percentage
		20	0.5%
		40	1.5%
		60	6.5%
		80	46%
		100	37%
		pan	8.5%
Moisture %	≤ 10 %	Pass	USP <731>

Strength			
Vitamin C	≥ 49% (As-is)	Pass	HPLC

QUALITY APPROVAL		
Prepared By / Date	Approved By / Date	Final Disposition
 6/5/2020	 06-05-2020	PASS

This product has been reviewed and approved. The results reported in this certificate of analysis (COA) are truthful and representative of the lot. The finished product and all raw materials used to manufacture the batch have been found to meet required specification limits in accordance with 21 CFR 111 (cGMP) regulations and the product is released.