



92 OAKLAND AVE, MONCTON, N.B. E1C 7P1

**CERTIFICATE OF ANALYSIS**

**Product Name:** Ecklonia Cava Powdered Extract 98.8%, 25:1  
**Lot #** E-0247050  
**Item Code:** HEXT-E-010  
**Country of Origin:** China  
**Manufacturing Date:** 02/2014  
**Expiration Date:** 12/2017

**GENERAL SPECIFICATION**

<b>BOTANICAL NAME</b>	<i>Ecklonia cava</i>
<b>COMMON/OTHER NAME</b>	Ecklonia cava
<b>PART USED</b>	Fronde and stipe
<b>APPEARANCE</b>	Fine powder
<b>EXTRACTION RATIO</b>	TBD
<b>EXTRACTION TYPE</b>	Full Spectrum Standardized
<b>EXTRACTION METHOD</b>	Pressure reiteration in closed system
<b>EXTRACTION TEMPERATURE</b>	< 90°C
<b>SOLVENT FOR EXTRACTION</b>	Water
<b>SOLUBILITY</b>	Water soluble/ dispersible
<b>HOMOGENEITY</b>	Completely homogenous
<b>CARRIER</b>	None
<b>PESTICIDES</b>	None detected
<b>CERTIFICATION</b>	Kosher pending

<b>CHARACTERISTIC STANDARD</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	<b>TEST METHOD</b>
	15% polyphenols (including phlorotannins) by gallic acid Folin C method	15.6%	MTC UV
<b>MESH SIZE</b>	80-100 Mesh	Passes	US sieve
<b>LOSS ON DRYING</b>	< 6%	3.8%	MTC method 1.1.1.0
<b>BULK DENSITY</b>	TBD	0.40 g/ml	USP <616>
<b>HPTLC IDENTIFICATION</b>	Standard plate	Passes	HPTLC
<b>TOTAL HEAVY METALS</b>	< 10ppm; USP<231>	<10 ppm	USP <231>
<b>COLOR</b>	Compares to standard	Brown	Visual
<b>ODOR</b>	Compares to standard	Compares to standard	Organoleptic
<b>TASTE</b>	Compares to standard	Compares to standard	Organoleptic
<b>MICROBIOLOGICAL TESTS</b>	<b>SPECIFICATION</b>	<b>RESULT</b>	
<b>TOTAL PLATE COUNT</b>	< 3000/g	<10/g	FDA-BAM
<b>YEAST AND MOLD</b>	< 100/g	<10/g	FDA-BAM
<b>E. COLI</b>	Negative	Negative	FDA-BAM
<b>SALMONELLA</b>	Negative	Negative	FDA-BAM
<b>STAPH AUREUS</b>	Negative	Negative	FDA-BAM
<b>TOTAL COLIFORMS</b>	Negative	Negative	FDA-BAM

**Quality Assurance-Nando Speranza**

*\*Product was manufactured in a facility that also processes: Soy, wheat, corn, celery, and other herbs, fruits and vegetables. 03/11 by GY*  
 Disclaimer: The test results listed are accurate to the best of our knowledge based upon our lab instruments and test methods. These results should not be used as a final determination for use in a finished product. According to GMP regulations, the specifications, test methods, and test results must be independently qualified by the purchasing party. The appropriate use of this product is the sole responsibility of the user or the purchasing party.

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