



100 south 5<sup>th</sup> street, suite 1085  
minneapolis, minnesota 55402

1.800.665.HEMP  
www.manitobaharvest.com

**CERTIFICATE OF ANALYSIS**

Product: **Broad Spectrum Hemp Extract (BSHE)  
Plant Protein Blend – Vanilla**

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Lot No: **190516**

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Source Lot No: P0531

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SKU#: 6133

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Date of Manufacture: May 16<sup>th</sup>, 2019

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Best Before Date: May 16<sup>th</sup>, 2020

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Ingredients: Organic pea protein concentrate, organic hemp protein concentrate, organic coconut sugar, natural flavors, organic guar gum. Contains less than 1% of broad spectrum hemp extract, organic coconut oil MCT, organic acacia gum, natural oregano extract.

Test	Analytical Result	Specification	Testing Method
<b>PROFILE</b>			
<b>CBD (total)</b>	13.2 mg/serving	12-18 mg/serving	HPLC (LOQ <25 ppm)
CBD	0.032 wt. %	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBDA	0.002 wt. %	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBC	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBDV	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBG	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBGA	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
CBN	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
<b>Δ9 THC (total)</b>	ND	< 0.3%	HPLC (LOQ <25 ppm)
Δ9 THC	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
THCA	ND	<i>Report only</i>	HPLC (LOQ <25 ppm)
<b>TERPENES</b>			
Total Terpenes	< 0.1 wt. %	<i>Report only</i>	HS-GC
<b>MICROBIOLOGICAL</b>			
Standard Plate Count	46,000 cfu/g	< 250,000 cfu/g	AOAC 996.23
Total Coliforms	< 10 cfu/g	< 500 cfu/g	AOAC 991.14
Yeast & Mold	< 20 cfu/g	< 1,000 cfu/g	BAM Chapter 18
E. coli	< 10 cfu/g	< 10 cfu/g	AOAC 991.14
<i>Salmonella</i>	Negative	Negative in 25g	AOAC 2004.03



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MYCOTOXINS			
Total Aflatoxin	< 2 ppb	< 20 ppb	In accordance with the requirements of ISO/IEC 17025
Total Ochratoxin	< 3 ppb	< 20 ppb	
CHEMICAL			
Pesticide	ND	Report only	LC/MS/MS
Lead	0.028 ppm	< 0.5 ppm	In accordance with the requirements of ISO/IEC 17025
Arsenic	0.014 ppm	< 0.2 ppm	
Cadmium	0.036 ppm	< 0.1 ppm	
Mercury	< 0.002 ppm	< 0.1 ppm	
Gluten	5.4 ppm	< 20 ppm	ELISA
SOLVENT RESIDUES			
Propane	< 200 ppm	1,000 ppm	HS-GC
Isobutane	< 200 ppm	1,000 ppm	HS-GC
Butane	< 200 ppm	1,000 ppm	HS-GC
Methanol	< 200 ppm	3,000 ppm	HS-GC
Ethanol	725 ppm	5,000 ppm	HS-GC
Acetone	< 200 ppm	5,000 ppm	HS-GC
Isopropanol	< 200 ppm	5,000 ppm	HS-GC
Acetonitrile	< 200 ppm	410 ppm	HS-GC
Hexane	< 200 ppm	290 ppm	HS-GC
Heptane	< 200 ppm	5,000 ppm	HS-GC
ORGANOLEPTIC			
Colour	Light tan with a hint of green		Internal SOP
Odour	Sweet, fragrant vanilla		Internal SOP
Taste	Sweet, creamy, vanilla		Internal SOP
Appearance	Fine powder with tan-brown specks		Internal SOP
Texture	Smooth fine powder with slight granular flavor particles, creamy		Internal SOP

\* ND = Not Detected

*Ashley Linden*

Ashley Linden  
Director, Quality

5/31/2019  
Date