

CERTIFICATE OF ANALYSIS

QUALITY CONTROL LABORATORY

PRODUCT: BEEF LIVER POWDER
UNDEFATTED

Factory/Administration: ~~Regada~~
~~9150/92 01110107 2~~
~~Bo. Argentina~~
~~Phone: (54 11) 4388 2111~~
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CERTIFICATE OF ANALYSIS N°: 9702

LOT: 8198

CLIENT: ~~XXXXXXXXXXXXXXXXXXXX~~

CONTRACT N°: PO 2099

MANUFACTURER FDA FACILITY REGISTRATION N°: 11581524732

R10996-F-31AUG23

- 1) Animal Species: Bovine.
- 2) All animal born, raised and was slaughtered in Argentina.
- 3) Argentina is a country free from BSE (Bovine Spongiform Encephalopathy)
- 4) The product is free from: Additives, hormones, solvents residues, antibiotics and pesticides.

504796

CHEMICAL ANALYSIS

Examination	Result	Specification	Method
Description	Brownish powder with characteristic odor and taste	---	---
Solubility Test	76.95 mg.	NMT 180 mg.	NF XI page 192
pH 20° C (5% sol)	4.77	4.50 to 5.50	USP valid method < 791>
Loss on drying	2.1%	Not More Than 6.0%	USP valid method<731>
Residue on ignition	4.9%	Not More Than 8.0%	USP valid method<281>
Nitrogen	12.06%	11.20% to 14.00%	USP valid method I<461>
Proteins	75.37%	70.00% to 87.50%	Nitrogen * 6.25
Fat	9.4%	Not More Than 15.0%	Pancreatin USP valid method page 4702
Vit. B12	1.57 mcg/g	Not Less than 1.5 mcg/g	Microbiology Test
Riboflavin	50.6 mcg/g	Not Less than 50 mcg/g	Microbiology Test
Nicotinic Acid	250.6 mcg/g	Not Less than 250 mcg/g	Microbiology Test
Choline	10.7 mg/g	Not Less than 10 mg/g	Chemical Test
Heavy metals	Less than 20 ppm	Less than 20 ppm	USP valid method (I) <231>
Arsenic	Not detectable	1.5 ppm	ICP MS
Cadmium	<0.1 ppm	0.5 ppm	ICP MS
Lead	Not detectable	0.5 ppm	ICP MS
Mercury	Not detectable	3 ppm	ICP MS
Particle size distribution	96% 40 mesh	90% to 100% 40 mesh	USP valid method <786>
Manufacturing Date	June, 2023	-----	-----
Expiration Date	July, 2026	Three years from COFA date	Periodic Stability Test



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República Dominicana
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MICROBIOLOGICAL ANALYSIS

Microbiological Control	Result	Specification	Method
Total aerobic microbial count	500 cfu./g.	Less than 3.000 cfu./g.	USP valid method<61>
Mold and Yeasts	<10 cfu./g.	Less than 100 cfu./g.	USP valid method<61>
Salmonella species	Negative	Negative	USP valid method<62>
Escherichia coli	Negative	Negative	USP valid method<62>
Staphylococcus aureus	Negative	Negative	USP valid method<62>
Pseudomona aeruginosa	Negative	Negative	USP valid method<62>
Enterobacters	Absence	Absence	USP valid method<62>

MICROBIOLOGICAL CONTROL

Envase N°	Aerobic	Molds /yeasts	Enterobacters	E coli	Staphylo.	Pseudom.	Salmonella
	(CFU /g.)			+/-	+/-	+/-	+/-
1	300	<10	Absence	(-)	(-)	(-)	(-)
2	300	<10	Absence	(-)	(-)	(-)	(-)
3	300	<10	Absence	(-)	(-)	(-)	(-)
4	200	<10	Absence	(-)	(-)	(-)	(-)
5	200	<10	Absence	(-)	(-)	(-)	(-)
6	<100	<10	Absence	(-)	(-)	(-)	(-)
7	<100	<10	Absence	(-)	(-)	(-)	(-)
8	<100	<10	Absence	(-)	(-)	(-)	(-)
9	<100	<10	Absence	(-)	(-)	(-)	(-)
10	<100	<10	Absence	(-)	(-)	(-)	(-)
11	<100	<10	Absence	(-)	(-)	(-)	(-)
12	<100	<10	Absence	(-)	(-)	(-)	(-)
13	<100	<10	Absence	(-)	(-)	(-)	(-)
14	<100	<10	Absence	(-)	(-)	(-)	(-)
15	<100	<10	Absence	(-)	(-)	(-)	(-)
16	<100	<10	Absence	(-)	(-)	(-)	(-)
17	<100	<10	Absence	(-)	(-)	(-)	(-)
18	<100	<10	Absence	(-)	(-)	(-)	(-)