

CERTIFICATE OF ANALYSIS

Product Information : Heart & Soil-Pure American Liver Capsules 180ct

Item : FGHRTSLIIVCAPS180CT

Batch ID : LOT: 0409724

Manufacture Date : 04/2024 **Expiration Date :** 04/2027

			Physical / Chemical		
Test	Description	Test Method	Limits	Results	Test Status
APPEARANCE	Appearance	Visual	00 Bovine clear capsules	00 Bovine clear capsules	Passed
HM_ARSENIC	Heavy Metal Arsenic	CM-9.00	REPORT ONLY	0.082 mcg/svg	Passed
HM_CADMIUM	Heavy Metal Cadmium	CM-9.00	REPORT ONLY	0.904 mcg/svg	Passed
HM_LEAD	Heavy Metal Lead	CM-9.00	REPORT ONLY	0.189 mcg/svg	Passed
HM_MERCURY	Heavy Metal Mercury	CM-9.00	REPORT ONLY	0.028 mcg/svg	Passed
IR-FG	Identification	USP<197A>	Minimum 90.00% match to standard	99.32%	Passed
IR-IP	Identification	USP<197A>	Minimum 90.00% match to standard	99.40%	Passed
PROTEIN CONTENT	Dry Basis Strength of Protein	Protein by Combustion CM 2.01	1.8g - 2.5g of Protein content per serving	2.16 g/svg	Passed
PURITY_MOISTURE	Moisture Analysis	Moisture Analysis	<10.00% after 10 minutes	4.14%	Passed
WTVAR	Weight Variation	USP<2091>	Weights are within 90.00% and 100.00% of the average weight	Conforms	Passed
			Microbiology		
Test	Description	Test Method	Limits	Results	Test Status
LOC_ECOLI	Absence of E. coli	USP <2022>	Absent in 10g	Absent	Passed
LOC_SALMONELLA	Absence of Salmonella	USP <2022>	Absent in 10g	Absent	Passed
LOC_SAUREUS	Absence of S. aureus	USP <2022>	Absent in 10g	Absent	Passed
LOC_TPC	Total Plate Count	AOAC_TEMPO	<100,000 cfu/g	Conforms	Passed
LOC_TYM	Total Yeast and Mold	AOAC_TEMPO	<1,000 cfu/g	Conforms	Passed

WARNING: Consuming this product can expose you to chemicals including Lead, Arsenic, Cadmium and Mercury, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov/food.

To maximize your products shelf life, Formulife requires that all finished good are stored in a climate controlled facility that is not to exceed 80°F or 60% relative humidity. It is recommended that all finished goods be stored at a maximum of 75°F and 45% relative humidity. Formulife will not be held liable for any issues with Product(s) nor will Customer be able to return any Product(s) that are not stored according to these terms.

Prepared By :

Wasponek

4/30/2024

Date

Reviewed By :

JEM

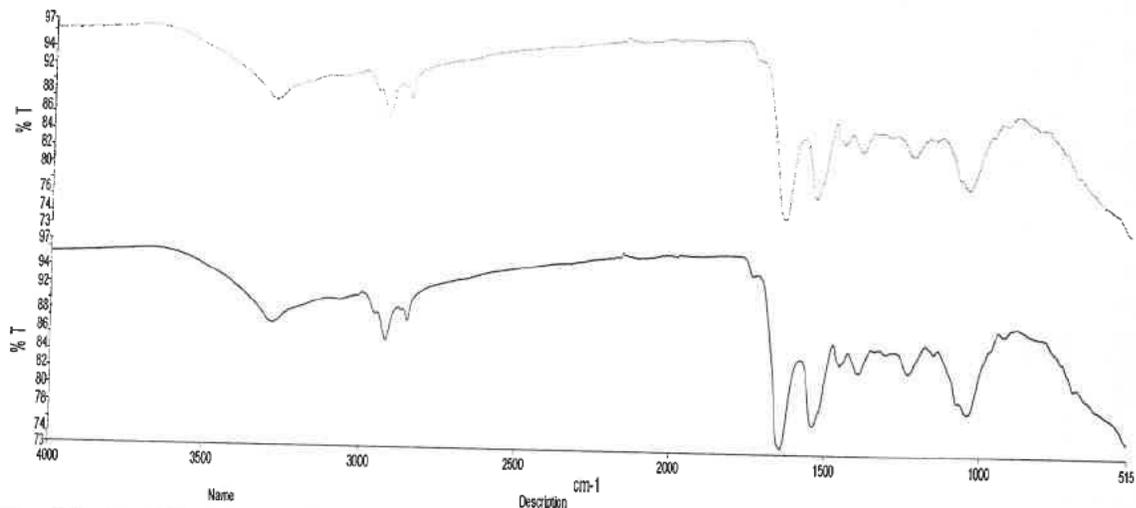
4/30/24

Date

Sample Details

Filename **FG- Heart & Soil- Pure American Liver Capsules- LOT- 0409724**
 Creation Date **04/22/2024 09:44:25 PM**
 Analyst **Administrator**
 X-Axis Units **cm-1**
 X-Axis start value **4000**
 X-Axis end value **515**
 Data interval **-1**
 Number of points **3486**
 Y-Axis Units **%T**
 Z-Axis Units
 Description **Sample 3679 By Administrator Date Monday, April 22, 2024**

Compare Results



Name: FG- Heart & Soil- Pure American Liver Capsules- LOT- 0409724 Description: Sample 3679 By Administrator Date Monday, April 22 2024
 Name: RMS- Gembra Health- Organic Bovine Liver Powder- Q-858- LOT-02132024.sp Description: Sample 2160 By Administrator Date Tuesday, February 13 2024

Compare Details

Sample Name	Correlation	Pass / Fail
RMS- [REDACTED] Organic Bovine Liver Powder- Q-858- LOT-02132024.sp	0.9932	Pass

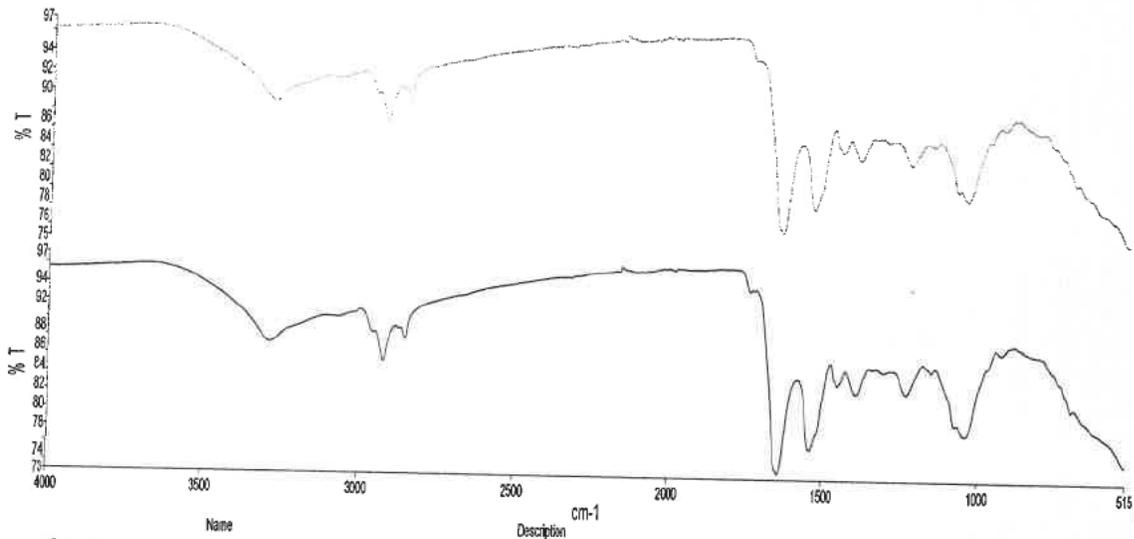
SA
 Performed by:
4/22/2024
 Date

JLM
 Reviewed by:
4/22/24
 Date

Sample Details

Filename **IP- Heart & Soil- Pure American Liver Capsules- LOT- 0409724**
 Creation Date **04/12/2024 2:59:38 PM**
 Analyst **Administrator**
 X-Axis Units **cm-1**
 X-Axis start value **4000**
 X-Axis end value **515**
 Data interval **-1**
 Number of points **3486**
 Y-Axis Units **%T**
 Z-Axis Units **%T**
 Description **Sample 3474 By Administrator Date Friday, April 12, 2024**

Compare Results



Name: IP-Heart & Soil- Pure American Liver Capsules- LOT- 0409724 Description: Sample 3474 By Administrator Date Friday, April 12 2024
 Name: RMS- Gamba Health- Organic Bovine Liver Powder- Q-858- LOT-02132024.sp Description: Sample 2160 By Administrator Date Tuesday, February 13 2024

Compare Details

Sample Name	Correlation	Pass / Fail
RMS- [REDACTED] Organic Bovine Liver Powder- Q-858- LOT-02132024.sp	0.9940	Pass

SA
 Performed by:
4/12/2024
 Date

Jum
 Reviewed by:
4/30/24
 Date



Twin Arbor Analytical

Your Quality Control Lab

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Certificate of Analysis

Accession: 8298 **Client:** Heart and Soil Supplements, LLC **Collection Date:**

Product: Pure American Liver **Received Date:** 1/23/2024 9:00 AM FR

Product Code: USABOVINE **Reported Date:** 4/17/2024 9:23 AM

Batch or Lot ID: GH23-196-01 **Report Status:** FINAL

Sample Description: Bovine Liver Powder - USA Organic

Analytical

Glyphosate by LCMS

Run by FR on 4/17/2024 9:12:42 AM at Location: JAL

SOP/Methodology: LC-MS/MS

Glyphosate Unit of Measure: mcg/kg

Test	Result	Units
Glyphosate	ND	mcg/kg

Residual Pesticides

Run by FR on 4/17/2024 9:22:06 AM at Location: JAL

SOP/Methodology: TM0004 / LC-MSMS

Test	µg/g	LOD (µg/g)	LOQ (µg/g)
Abamectin	ND	0.0027	0.0114
Acephate	ND	0.0021	0.01
Acequinocyl	ND	0.0273	0.0827
Acetamiprid	ND	0.0013	0.01
Aldicarb	ND	0.0048	0.025
Azoxystrobin	ND	0.0034	0.0103
Bifenazate	ND	0.0022	0.01
Bifenthrin	ND	0.0035	0.049
Boscalid	ND	0.0057	0.025
Captan	ND	0.0342	0.104
Carbaryl	ND	0.0023	0.01
Carbofuran	ND	0.0052	0.0157
Chlorantraniliprole	ND	0.0048	0.0146
Chlordane	ND	0.0293	0.0888
Chlorfenapyr	ND	0.0158	0.05
Chlorpyrifos	ND	0.0025	0.01
Clofentezine	ND	0.0039	0.0117
Coumaphos	ND	0.0018	0.01
Cyfluthrin	ND	0.028	0.0849
Cypermethrin	ND	0.0044	0.051
Daminozide	ND	0.0029	0.01
DDVP (Dichlorvos)	ND	0.0101	0.0306
Diazinon	ND	0.0009	0.01
Dimethoate	ND	0.0025	0.01
Dimethomorph	ND	0.0046	0.0141
Ethoprop(hos)	ND	0.0044	0.0132
Etofenprox	ND	0.0007	0.025
Etoxazole	ND	0.0004	0.025
Fenhexamid	ND	0.0082	0.0248
Fenoxycarb	ND	0.0031	0.025
Fenpyroximate	ND	0.0013	0.01
Fipronil	ND	0.002	0.01
Flonicamid	ND	0.0016	0.01
Fludioxonil	ND	0.0071	0.0214



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Product: Pure American Liver		Received Date: 1/23/2024 9:00 AM FR
Product Code: USABOVINE		Reported Date: 4/17/2024 9:23 AM
Batch or Lot ID: GH23-196-01	Sample Description: Bovine Liver Powder - USA Organic	Report Status: FINAL

Analytical

Test	µg/g	LOD (µg/g)	LOQ (µg/g)
Hexythiazox	ND	0.0009	0.01
Imazalil	ND	0.0057	0.0173
Imidacloprid	ND	0.0024	0.01
Kresoxim-methyl	ND	0.0073	0.022
Malathion	ND	0.0027	0.01
Metalaxyl	ND	0.0017	0.01
Methiocarb	ND	0.0027	0.01
Methomyl	ND	0.0027	0.01
Methyl parathion	ND	0.0146	0.05
Mevinphos	ND	0.0049	0.0212
Myclobutanil	ND	0.0326	0.0988
Naled	ND	0.0029	0.01
Oxamyl	ND	0.0016	0.01
Paclobutrazol	ND	0.0057	0.0174
Pentachloronitrobnzn	ND	0.0295	0.0894
Permethrins	ND	0.029	0.092
Phosmet	ND	0.0036	0.025
Piperonylbutoxide	ND	0.0021	0.01
Prallethrin	ND	0.0038	0.025
Propiconazole	ND	0.0122	0.037
Propoxur	ND	0.0017	0.01
Pyrethrin	ND	0.0154	0.0465
Pyridaben	ND	0.0005	0.01
Spinetoram	ND	0.0001	0.009
Spinosad	ND	0.0001	0.009
Spiromesifen	ND	0.003	0.025
Spirotetramat	ND	0.0023	0.01
Spiroxamine	ND	0.0022	0.01
Tebuconazole	ND	0.0021	0.01
Thiacloprid	ND	0.0011	0.01
Thiamethoxam	ND	0.0008	0.01
Trifloxystrobin	ND	0.0012	0.01

Analytical - Elemental Analyses

Heavy Metals (As, Cd, Hg and Pb) Run by FR on 4/17/2024 9:11:29 AM at Location: TAL

SOP/Methodology: USP 233

Test	Result	LOD (Result)	LOQ (Result)	Units	Specification	Status
Arsenic (As)	0.03724	0.004130	0.01238	ppm	<1 ppm	Within Specification
Cadmium (Cd)	0.3744	0.004130	0.01238	ppm	<1 ppm	Within Specification
Lead (Pb)	0.01783	0.004130	0.01238	ppm	<1 ppm	Within Specification
Mercury (Hg)	ND	0.004130	0.01238	ppm	<1 ppm	Within Specification



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Product Code: USABOVINE		Reported Date: 4/17/2024 9:23 AM
Batch or Lot ID: GH23-196-01	Sample Description: Bovine Liver Powder - USA Organic	Report Status: FINAL

Reviewed By: 
Richmond, Forrest - Analytical Director

Panel Name: Glyphosate by LCMS	Approved: 4/17/2024 9:23 AM
Panel Name: Residual Pesticides	Approved: 4/17/2024 9:23 AM
Panel Name: Heavy Metals (As, Cd, Hg and Pb)	Approved: 4/17/2024 9:23 AM

ND = Not Detected | LOD = Limit of Detection | LOQ = Limit of Quantification

Product details are provided by the Client and are not verified by the laboratory.
Not all methods are ISO17025:2017 accredited.