

SPECIFICATIONS: Hempseed Oil

Hemp seed oil is a raw ingredient used in edible oil products. It consists of organic cold pressed hemp seeds.

Application and Use	Ingredient	Appearance	Translucent green liquid
Composition	100% Hemp seed oil by weight	Odor	Mild and nutty
Organic Certification	Certified Organic	Consistency	Liquid
Storage and Shelf Life	12 months from the date of production in original packaging. Store cool dark and dry.	Density	0.915 - 0.925
Ingredients used in	Classic, Companion, and Signature Blends	Solubility	Soluble at oils

Ingredient	Hemp seed oil	Item Code	HSO
Botanical Name	<i>Cannabis sativa</i>	Organic Certification	Certified Organic
Plant parts used in oil	Seed	Country of Origin	Canada

Nutritional Method: AOAC 954.02, AOCS Cd 8b-90, AOCS Ca 5a-40, Veratox Elisa Gliadin R5		Heavy Metals Method: ICP-MS	
Gluten	<20 ppm	Arsenic	< 10 ppb
Peroxide Value	0-10 meq/kg	Cadmium	< 10 ppb
Fat	96-100%	Mercury	< 10 ppb
Fatty Acid Profile (Area %) Method: Ce 2b-11 (2011), Ce 1i-07, Ce 2-66 (2009)		Lead	< 10 ppb
Palmitic Acid	>4.5%	Mycotoxins Method: UHPLC-MS/MS	
Stearic Acid	>2%	Total Aflatoxin	< 5 ppb
Oleic Acid	>8.5%	Total Ochratoxin	< 5 ppb
Linoleic Acid	>44%	Microbiological Contamination Method: qPCR	
Alpha Linolenic Acid	>14%	Total Aerobic Bacterial Count	< 1,000 CFU/g
Solvents Method: GC/MS		Total Coliform Bacterial Count	< 100 CFU/g
Propane, Propane, Butanes, Pentane, Hexane, Benzene, Heptane, Toluene, Xylenes Ethanol, Acetone, Isopropyl Alcohol	0 ppb	Total Bile Tolerant Gram Negative Count	< 1,000 CFU/g
Solvents Method: GC/MS		Total Yeast and Mold	< 1,000 CFU/g
Propane, Propane, Butanes, Pentane, Hexane, Benzene, Heptane, Toluene, Xylenes Ethanol, Acetone, Isopropyl Alcohol	0 ppb		

Pesticides Testing Methods: GC/MS and/or LC/MS	
Abamectin 71751-41-2, Acequinocyl 57960-19-7, Acequinocyl 57960-19-7, Bifenazate 149877-41-8, Bifenthrin 82657-04-03, Chlormequat chloride 999-81-5, Cyfluthrin 68359-37-5, Cyfluthrin 68359-37-5, Daminozide 1596-84-5, Etoxazole 153233-91-1, Fenoxycarb 72490-01-8, Paclobutrazol 76738-62-0, Pyrethrin 8003-34-7, Spinosad 168316-95-8, Spiromesifen 283594-90-1, Myclobutanil 88671-89-0, Imazalil 35554-44-0, Imidacloprid 138261-41-3, Spirotetramat 203313-25-1, Trifloxystrobin 141517-21-7	< 10 ppb

Specification Sheet: Hemp Classic Extract

Hemp Classic Extract is an oil meant for oral ingestion. It consists of blended hemp extract and cold pressed organic hempseed oil.

Application and Use	Dietary Supplement	Appearance	Greenish-brown, oily liquid
Composition	3% - 6% hemp extract by weight 94% - 97% hemp seed oil by weight	Odor	Grassy, earthy odor
Organic status	Extract: not certified Hemp seed oil: certified organic	Consistency	Viscous below 32 degrees F
Organic Certification	Not certified organic	Density	0.915 mg/mL - 0.925 mg/mL
Storage and Shelf Life	500 days from the date of production in original packaging. Store cool dark and dry.	Solubility	Soluble in oils and ethanol
Packaging	10ml, 30ml, 60ml amber glass essence bottle		

Ingredient	Hemp seed oil	Item Code	HSO
Botanical Name	<i>Cannabis sativa</i>	Organic Certification	Certified organic



500 South Arthur Ave Unit 300, Louisville, CO, 80027
 720-726-5132
www.bluebirdbotanicals.com

Plant parts used in oil	Seed	Country of Origin	Canada
Ingredient	Hemp CO2 extract	Item Code	DCFL
Botanical Name	<i>Cannabis sativa</i>	Organic Certification	Not certified
Plant parts used in oil	Seed, stem, flower	Country of Origin	USA
Ingredient	Hemp CO2 extract	Item Code	DCFL
Botanical Name	<i>Cannabis sativa</i>	Organic Certification	Not certified
Plant parts used in oil	Seed, stem, flower	Country of Origin	USA

Our Low THC Hemp Extract Product is manufactured by Bluebird Botanicals according to cGMP practices.

Batch: CL 0380. Batch Size: 378.5 Liters (348.22 Kg). Total Quantity Produced (packaging plan based on estimates): 10 ml bottle: 2815.30 ml bottle: 4205. 60 ml bottle: 2455. Volume allocated to bulk wholesale purchasing: 75708 ml (75.7 liters). Yield: 99.69%. Supplier Lot Codes: Primary Ingredient: MY-300-001, CH17F2D, CCE-1. Carrier: 17-WINEPIO-01

Potency Method: UPLC		Mycotoxins Method: UHPLC-MS/MS	
Total Cannabinoids	8.4 - 10 mg/ml (250 -300 mg/ounce)	Total Aflatoxin	< 5 ppb
Tetrahydrocannabinol (THC)	< 0.3%	Total Ochratoxin	< 5 ppb
Heavy Metals Method: ICP_MS		Microbiological Contamination Method: qPCR	
Arsenic	< 10 ppb	Total Aerobic Bacterial Count	< 1,000 CFU/g
Cadmium	< 10 ppb	Total Coliform Bacterial Count	< 100 CFU/g
Mercury	< 10 ppb	Total Bile Tolerant Gram Negative Count	< 1,000 CFU/g
Lead	<30 ppb	Total Yeast and Mold	< 1,000 CFU/g
Solvents Method: GC/MS			
Hexane: < 6 ppm, Benzene: < 0.2 ppm, Toluene: < 18 ppm, Xylenes: < 43 ppm			
Ethanol, Acetone, Isopropyl Alcohol, Propane, Butanes, Pentane, Heptane			< LOQ (100 ppm)
Pesticides Method: GC/MS and/or LC/MS			
Abamectin 71751-41-2, Acequinocyl 57960-19-7, Acequinocyl 57960-19-7, Bifenazate 149877-41-8, Bifenthrin 82657-04-03, Chlormequat chloride 999-81-5, Cyfluthrin 68359-37-5, Cyfluthrin 68359-37-5, Daminozide 1596-84-5, Etoxazole 153233-91-1, Fenoxycarb 72490-01-8, Pacllobutrazol 76738-62-0, Pyrethrin 8003-34-7, Spinosad 168316-95-8, Spiromesifen 283594-90-1, Myclobutanil 88671-89-0, Imazalil 35554-44-0, Imidacloprid 138261-41-3, Spirotetramat 203313-25-1, Trifloxystrobin 141517-21-7			< 30 ppb

DISCLOSURE OF PRODUCT COMPONENTS: OUR LOW THC HEMP EXTRACT PRODUCTS ARE BLENDED USING A COMBINATION OF FULL SPECTRUM CANNABINOID EXTRACTS, ORGANIC CARRIER OILS AND ESSENTIAL OILS, THE CONTENTS, IDENTITY AND PURITY OF WHICH HAVE BEEN TESTED USING A VARIETY OF METHODS, INCLUDING AOAC-APPROVED METHODS OF ANALYSIS. AOAC INTERNATIONAL IS AN INDEPENDENT, INTERNATIONALLY RECOGNIZED 501(C)(3) NOT-FOR-PROFIT ASSOCIATION WHOSE ANALYTICAL STANDARDS APPLY TO A BROAD RANGE OF INDUSTRIES INCLUDING FOODS, BEVERAGES AND DIETARY SUPPLEMENTS. INGREDIENT AND SERVICE PROVIDERS HAVE BEEN QUALIFIED BY AN INTERNAL QUALITY MANAGEMENT TEAM ACCORDING TO A CGMP-COMPLIANT PROTOCOL. THE QUALIFICATION OF A SUPPLIER ENTAILS INGREDIENT TESTING INCLUDING BUT NOT LIMITED TO THE FOLLOWING ASSAYS: FATTY ACIDS (OFFICIAL METHODS OF ANALYSIS OF AOAC INTERNATIONAL, 18TH ED., METHODS 922.06 AND 954.02), PEROXIDE VALUE (AOAC INTERNATIONAL, OFFICIAL METHODS 965.33 AND 983.23), YEAST AND MOLD ANALYSIS (AOAC INTERNATIONAL, OFFICIAL METHOD 997.02), AEROBIC PLATE COUNT (AOAC INTERNATIONAL, OFFICIAL METHOD 990.12), ELEMENTS (AOAC INTERNATIONAL, OFFICIAL METHODS 2011.19 AND 993.14), REGULATED MYCOTOXINS (CITATION: ANALYTICAL AND BIOANALYTICAL CHEMISTRY, 402:2675-2686), E. COLI AND COLIFORMS (AOAC INTERNATIONAL, OFFICIAL METHOD 991.14), MULTI-RESIDUE ANALYSIS (AOAC INTERNATIONAL, OFFICIAL METHOD 2007.01), GLUTEN (AOAC INTERNATIONAL, OFFICIAL METHOD 2012.01), RESIDUAL SOLVENTS (UNITED STATES PHARMACOPEIA METHOD 467). THE AFOREMENTIONED METHODS OF ANALYSIS UTILIZE BUT ARE NOT NECESSARILY LIMITED TO QUANTIFICATION BY HPLC, UPLC/MS, GC/MS, IAC, SFC, ICP-MS. INGREDIENT CONSISTENCY IS ADDITIONALLY EVALUATED THROUGH REGULAR ORGANOLEPTIC SCREENING TO CONTROL TASTE, ODOR, COLOR AND CONSISTENCY. THE FOLLOWING SUPPLIERS/ MANUFACTURERS/SERVICE PROVIDERS HAVE BEEN QUALIFIED BY INTERNAL QUALITY MANAGEMENT: HEMP PRODUCTION SERVICES, SUPPLIER OF ORGANIC HEMP SEED OIL, JEDWARDS INTERNATIONAL, SUPPLIER OF ORGANIC HEMP SEED OIL, ORGANIC OLIVE OIL, ORGANIC BLACK CUMIN SEED OIL, EDEN BOTANICALS, SUPPLIER OF SUPERCRITICAL CO2 EXTRACTED FRANKINCENSE (BOSWELLIA CARTERII) AND CANNABIS ESSENTIAL OIL, EBL HEALTH, MANUFACTURERS/SUPPLIERS OF CO2 HEMP EXTRACTS, PHYTO BOTANICALS, MANUFACTURER OF ETHANOL HEMP EXTRACT, HAMMER, MANUFACTURER/CO-PACKER OF GEL CAPSULES. PROPRIETARY LOW THC HEMP EXTRACT PRODUCTS ARE MANUFACTURED BY BLUEBIRD BOTANICALS ACCORDING TO CGMP PRACTICES. ALL PRODUCTS ARE TESTED FOR MYCOTOXINS, PESTICIDES, ELEMENTS, RESIDUAL SOLVENTS, TERPENE PROFILES AND CANNABINOID POTENCY TO CONTROL ADHERENCE TO PRODUCT SPECIFICATIONS AND GUARANTEE CONFORMITY TO THE STRICT DEFINITION OF INDUSTRIAL HEMP (<0.3% DELTA9-THC, INCLUDING PRECURSORS). THIRD PARTY LABORATORY ANALYSIS IS CONDUCTED BY BOTANACOR SERVICES, DELTA VERDE LABORATORY, PROVERDE LABORATORIES AND COVANCE INC. ISO ACCREDITED (ISO 17025) ASSAYS ARE PROVIDED BY PROVERDE LABORATORIES AND COVANCE INC. SEE PRODUCT SPECIFICATION SHEET ABOVE FOR PRODUCT/INGREDIENT BATCH INFORMATION AND PROJECTED PACKAGING PLAN. ALL SUPPLIERS OF PACKAGING SUPPLIES HAVE BEEN QUALIFIED ACCORDING TO CGMP STANDARDS.