

Technical Data Sheet

ElderCraft® 3.2% Liquid

Standardized Elderberry Liquid, 3.2%
(*Sambucus nigra*)



Product Code: B0120199

Product Specification

Product Description: Pure European black elderberry (*Sambucus nigra*) liquid; concentrated without organic solvents via physical membrane separation; standardized to a minimum anthocyanin content of 3.2%

Product Properties

Color	Intensely dark red
Appearance	Uniform liquid
Taste	Characteristic of elderberry; astringent
Odor	Characteristic of elderberry
Extract ratio	16:1
Identity	HPLC anthocyanin profile unique to elderberry
Plant part used	Berries (fruit)

Analytical Values

Spec.

Anthocyanins (<i>Expr. as cyanidin-3-glucoside; pH-Diff.</i>)	3.20 – 4.20	g/100 g
Anthocyanins (<i>Expr. as cyanidin-3-glucoside; HPLC</i>)	3.20 – 3.80	g/100 g
Polyphenols (<i>Expr. as catechin; Folin-Ciocalteu</i>)	4.20 – 8.10	g/100 g
Color units (<i>E 100%; 510 nm; pH 1.0</i>)	2,400 – 2,600	
Soluble solids (<i>Refractometer; 20° C</i>)	30.0 – 34.0	°Brix
Total acidity (<i>Expr. as citric acid; anhydr.; pH 8.1</i>)	3.00 – 5.00	g/100 g
pH	2.90 – 3.50	

Heavy Metals and Pesticides

Spec.

Lead (<i>ICP-MS</i>)	< 0.6	ppm
Arsenic (<i>ICP-MS</i>)	< 0.3	ppm
Cadmium (<i>ICP-MS</i>)	< 0.1	ppm
Mercury (<i>ICP-MS</i>)	< 0.05	ppm
Pesticides	The processed fruit conforms to the pesticide standards defined in the FDA and EPA regulations.	

Microbiological Values

Spec.

Yeast (<i>Sabouraud Agar, 28°C, 5 d</i>)	0	CFU/g
Molds (<i>Sabouraud Agar, 28°C, 5 d</i>)	0	CFU/g
Total plate count (<i>ISO 4833</i>)	< 100	CFU/g
<i>E. coli</i> (<i>COLI ID Agar, 37°C, 24 h</i>)	0	CFU/g
<i>Salmonella</i> (<i>ISO 6579</i>)	Absent	/25 g

Country of Origin: Italy (manufacturing), Austria (raw material)

Packaging: Aseptically packed in 20 kg pails

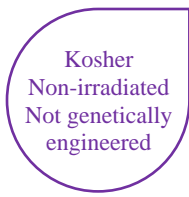
Storage: Store below 4° C. If package is opened, use immediately or store at -18 to -25° C.

Best Used By: 8 months after production date if unopened and kept under proper storage conditions

Melanie Bush

Quality Control

The information contained herein is, to the best of our knowledge, correct. The data outlined and the statements made are intended only as a source of information. No warranties, expressed or implied, are made. On the basis of this information, it is suggested that you evaluate the product on a laboratory scale prior to use in a finished product.



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Composition Statement

We hereby certify that, for the above named product, the composition is as follows:

Genus and species: *Sambucus nigra*
Plant part used: Berries (fruit)
Ingredients: Elderberry liquid extract
Country of origin: Italy (manufacturing), Austria (raw material)
Final form: Liquid

GMO Statement

The above named product is not genetically engineered.

Gluten-Free Statement

The above named product is entirely of fruit/vegetable origin. It is not produced from and does not contain any gluten or gluten byproducts; therefore, it is considered gluten-free.

Vegan Statement

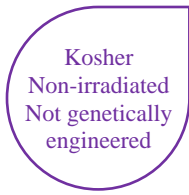
The above named product is entirely of fruit/vegetable origin and is not produced from any animal products or byproducts; therefore it is considered vegan-friendly.

BSE/TSE Statement

The above named product is risk free for BSE/TSE because it is not processed with any meat products or by-products. Furthermore, no meat products or by-products are manufactured or processed on the premises.

Irradiation and Sterilization Statement

The above named product has not been irradiated during the manufacturing process, nor has any chemical sterilization method been used. We also confirm that it has not been exposed to ethylene oxide (EtO) and is considered an EtO-free product. The product has been flash-pasteurized.



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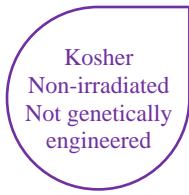
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Nutritional Profile

Mean values per 100 g

Calories (kcal)	86	kcal
Calories (kJ)	365	kJ
Fat	0.1	g
Saturated Fat	< 0.1	g
Carbohydrates	19.2	g
Sugars	6.8	g
Protein	1.7	G
Salt	0.015	g

As with any natural material, there may be some variation in the nutritional composition. The following values are being supplied to you to aid in your development work, but should not be used solely to determine your nutrient labeling. You may need to analyze for those nutrients as they occur in your final product as required by the Code of Federal Regulations Title 21; section 101.9.



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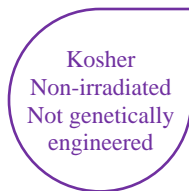


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Allergen Statement

Description of Allergen	Present in the Product	Source	Present in Other Products Mfg. on the Same Line	Present in the Same Mfg. Plant
Artificial colors/preservatives	No		No	No
Autolyzed yeast	No		No	No
Celery	No		No	No
Cereal proteins (include HVP)	No		No	No
Corn or corn products	No		No	Yes
Cottonseed flour	No		No	No
Egg or egg products	No		No	No
Fish or fish products	No		No	No
Gluten	No		No	No
Milk or milk-derived products	No		No	No
Mustard or mustard products	No		No	No
Peanuts or peanut products	No		No	No
Seeds or seed products	No		No	No
Sesame or sesame products	No		No	No
Shellfish, crustaceans	No		No	No
Soybeans or soybean products	No		No	No
Sulfites	No		Yes	Yes
Tree nuts (almond, brazil nut, cashew, chestnut, hazelnut, pine nuts, pistachio, pecan, macadamia, walnut)	No		No	No
Wheat or wheat products	No		No	No
Yeast or yeast products	No		No	No

Effective procedures are in place to avoid cross-contamination of the product with the allergens not present in the product but noted in columns III and IV.



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Safety Data Sheet

Section I Product and Company Identification

Product:	ElderCraft® 3.2% Liquid	Product Code:	B0120199
Supplier:	Artemis International, Inc. 3711 Vanguard Dr. – Suite A Fort Wayne, IN 46809-3301 USA	Phone:	260-436-6899
		Fax:	260-478-6900

Section II Hazard Identification

Physical hazards:	Not classified as a physical hazard
Health hazards:	Not classified as a health hazard
Environmental hazards:	Not classified as an environmental hazard
Specific hazards:	Food, not a hazardous substance or mixture.
Main symptoms:	N/A

Section III Composition/Ingredients

Ingredients:	Elderberry extract
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Section IV First Aid Measures

Eye contact:	Wash immediately with enough water for products with pH < 2.0, irritant.
Skin contact:	Not irritant, wash with water for products with pH < 2.0
Inhalation:	Not gaseous, no hazardous decomposition products.
Ingestion:	Not irritant, drink water for products with pH < 2.0

Section V Fire Fighting Measures

Flammability:	Product is not combustible.
Extinguishing media:	Product is not flammable. Use water, carbon dioxide, dry powder extinguisher, or other media appropriate for materials actually involved in fire.
Special firefighting procedures:	Follow the general fire precautions indicated in the workplace.
Unusual fire and explosion hazards:	None

Section VI Accidental Release Measures

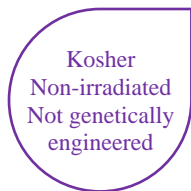
Leak and spill procedures:	Prevent further spill of material, and contain material already spilled. Mop up spilled material for disposal. Flush spill area with water spray. CAUTION! Material on wet floor may be slippery.
Personal precautions:	No special precautions.
Methods for cleaning up:	Remove small spills with absorbent material.
Environmental precautions:	Prevent further leakage or spillage.

Section VII Handling and Storage

Handling procedures:	Handle with good manufacturing practices for reasons of hygiene.
Hygiene practices:	Follow food GMPs. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.
Storage:	Store < 5° C to avoid color and flavor degradation.

Section VIII Exposure Controls and Personal Protection

Engineering controls:	Eyewash fountains and safety showers should be easily accessible.
Respiratory protection:	None.
Protective gloves:	Avoid skin contact. Wear gloves for extended or repeat skin contact for products with pH < 2.0.
Eye protection:	Avoid eye contact. Wear safety glasses while handling products with pH < 2.0.



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Clothing: Standard work clothing; wash regularly.

Section IX Physical and Chemical Characteristics

Appearance:	Intensely dark red, viscous, uniform liquid	Boiling point:	Not known
Odor:	Characteristic of elderberry	Freezing point:	Not known
Physical state:	Liquid	Melting point:	Not known
pH:	2.90-3.50	Vapor pressure:	Not known
Solubility in water:	N/A	Vapor density:	Not known
Density:	1.050- 1.110 g/ml		

Section X Stability and Reactivity

Chemical stability:	Stable, no decomposition
Conditions to avoid:	Storage temperature above 35°
Materials to avoid:	None known
Hazardous decomposition or byproducts:	None known
Hazardous polymerization:	Does not occur

Section XI Toxicological Information

No known toxic effects from acute or chronic exposure

Section XII Ecological Information

No known environmental impact. Product is biodegradable.

Section XIII Disposal Information

Waste disposal method: Incinerate or landfill in accordance with local, state, or federal regulations.

Section XIV Transportation Information

Shipping information: Non-hazardous

Section XV Regulatory Information

None

Section XVI Other Information

Prepared: 6.18.19 Last Revision 6.18.19

All information appearing herein is based upon data obtained from the raw material manufacturer and/or recognized technical sources. While the information above is believed to be true and accurate, the author makes no representations as to its accuracy or sufficiency. Conditions of use are beyond the producer's control, and therefore the users are responsible to verify this data under their own particular conditions, applications, and regulations to determine whether the product is suitable for their particular purposes, and they assume all risks of their use, handling, disposal, reliance upon, publication, or use of the information contained herein. This information applies only to the product designated above and does not necessarily apply to its use in combination with other materials, products, chemical compounds, structures, or processes.

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