

# Technical Data Sheet

## ElderCraft® 3.2% Liquid

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



**Product Code:** B0120199

**Date:** November 2019

### Product Specification

**Product Description:** Pure European black elderberry (*Sambucus nigra*) liquid; concentrated without 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 |
| 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                | Pesticide standards defined in the EC Regulations n. 396/2005, n. 149/2008, and n. 839/2008 |       |

#### 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 | CFU/25 g |

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

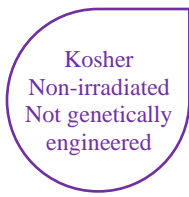
**Packaging:** Aseptically packed in 20 kg pails

**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:

|                           |   |
|---------------------------|---|
| <b>Genus and species:</b> | <i>Sambucus nigra</i>                         |
| <b>Plant part used:</b>   | Berries (fruit)                               |
| <b>Ingredients:</b>       | Elderberry liquid extract (100%)              |
| <b>Country of origin:</b> | Italy (manufacturing), Austria (raw material) |
| <b>Harmonized code:</b>   | 3203.00                                       |
| <b>Final form:</b>        | 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

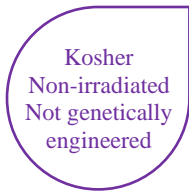
The above named product is entirely of fruit/vegetable origin and is not produced from any animal products or byproducts; therefore it is considered vegan-friendly.

## 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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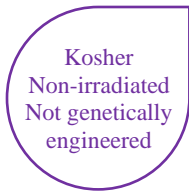
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**Nutritional Profile**

**Mean values per 100 g**

|                 |       |      |
|-----------------|-------|------|
| Calories (kcal) | 83    | kcal |
| Calories (kJ)   | 352   | kJ   |
| Fat             | 0.1   | g    |
| Saturated Fat   | <0.1  | g    |
| Carbohydrates   | 18.6  | g    |
| Sugars          | 7.9   | g    |
| Protein         | 1.7   | g    |
| Salt            | 0.015 | g    |

As with any organic 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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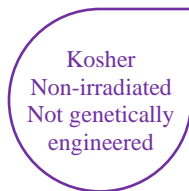
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**Allergen Statement**

| 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.<br>3711 Vanguard Dr. – Suite A<br>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 |
|--------------|--------------------|

**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**

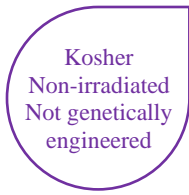
|                            |   |
|----------------------------|---|
| Leak and spill procedures: | Prevent further spill of material, and contain material already spilled. Mop up spilled material for disposal. Flush spill area with water spray. CAUTION! Material on wet floor may be slippery. |
| Personal 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

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*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.