

Technical Data Sheet
 Standardized Cranberry Powder,
 1.0% PAC (BL-DMAC)
 (*Vaccinium macrocarpon*)

Product Code: 54264230
Date: January 2020

Product Specification

Product Description: Pure cranberry (*Vaccinium macrocarpon*) extract; spray-dried with magnesium hydroxide (< 9%) as an excipient; standardized to a minimum proanthocyanidin content of 1% via BL-DMAC

Product Properties

Color	Pink
Appearance	Powder, fine, free-flowing
Taste	Characteristic of cranberry
Odor	Characteristic of cranberry
Mesh size	> 95% through 80 mesh
Excipient	Magnesium hydroxide
Extract ratio	25:1
Plant part used	Berries (whole fruit)

Analytical Values

Spec.

Proanthocyanidins (<i>BL-DMAC</i>)	≥ 1.0	g/100 g
Moisture (<i>Loss on drying; 100 – 105° C; 2 hours</i>)	≤ 5	%

Microbiological Values

Spec.

Yeast (<i>NF ISO 21527-2</i>)	< 100	CFU/g
Mold (<i>NF ISO 21527-2</i>)	< 100	CFU/g
Total plate count (<i>NF EN ISO 4833-1</i>)	< 1,000	CFU/g
<i>Enterobacteriaceae</i> (<i>NF ISO 21528</i>)	<10	CFU/g

Country of Origin: Canada (manufacturing), US/Canada (raw material)

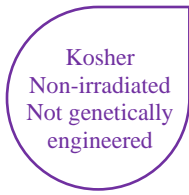
Packaging: Poly bag in corrugate box, 10 kg net weight

Storage: The product must be stored in a dark, cool (≤ 75° F/ 24° C), and dry area. Keep the package well-sealed since the product is hygroscopic. Color may change at the end of shelf life. Moisture absorption may cause changes in chemical values.

Best Used By: 36 months after production date 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:	<i>Vaccinium macrocarpon</i>
Plant part used:	Berries (whole fruit)
Ingredients:	Cranberry fruit (> 90%), magnesium hydroxide (< 9%)
Country of origin:	Canada (manufacturing), US/Canada (raw material)
Final form:	Powder

GMO Statement

The above named product and any excipients used in the manufacturing process are 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

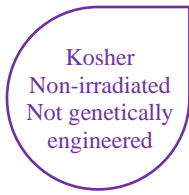
The above named product is entirely of fruit/vegetable origin and is not produced from any animal products or byproducts; therefore it is considered vegan-friendly.

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.



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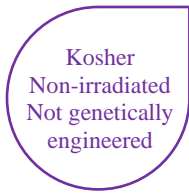
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Nutritional Profile

Mean values per 100 g

Calories	145	kcal
Total Fat	0.7	g
Saturated Fat	0.2	g
Trans Fat	0	g
Cholesterol	0	g
Sodium	100	mg
Total Carbohydrates	71	g
Dietary Fiber	5.1	g
Sugars	30.6	g
Protein	0.8	g
Ash (minerals)	9.7	g
Calcium	246	mg
Iron	14	mg

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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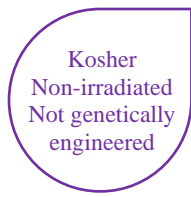
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Allergen Statement

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	No
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 (specify)	No		No	No
Soybeans or soybean products	No		No	No
Sulfites (specify level)	No		No	No
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:	Standardized Cranberry Powder, 1.0% PAC	Product code:	54264230
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

This preparation is not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP] and its amendments.	
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:	Dusts may irritate the respiratory tract, skin, and eyes. Risk of dust explosion. May form explosible dust-air mixture if dispersed.
Main symptoms:	Upper respiratory tract irritation, coughing, irritation of eyes and mucous membranes

Section III Composition/Ingredients

Ingredients:	Cranberry extract, magnesium hydroxide excipient
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Section IV First Aid Measures

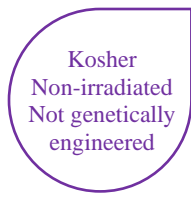
Eye contact:	Dusting of powder may cause eye irritation. Flush eyes with water for 15 minutes. Get medical attention if symptoms develop and persist.
Skin contact:	Product is not irritating to skin; however, flush with water or soap and water for 15 minutes or until all traces have been removed. Seek medical attention if symptoms develop and persist.
Inhalation:	Product may cause irritation of the nose and throat. If inhaled, remove personnel to fresh air and, if needed, seek medical attention.
Ingestion:	Product is not known to result in significant adverse health effects. If swallowed, rinse mouth and throat with water. Drink water.

Section V Fire Fighting Measures

Flammability:	Suspension of the dust in the air could produce an explosive atmosphere. If exposed to high temperatures, the product may release hazardous decomposition products such as carbon monoxide and carbon dioxide.
Extinguishing media:	Water spray with additives, chemical powder, chemical foam, carbon dioxide extinguisher
Special firefighting procedures:	Do not enter the fire area without proper protective equipment, including respiratory protection. Packaging exposed to heat or open flames should be cooled with a fine water spray. Avoid solid water jets or high pressure media which could cause the formation of potentially explosible dust-air mixtures. Prevent fire-fighting water from entering drains.
Unusual fire and explosion hazards:	Suspension of the dust in the air could produce an explosive atmosphere.

Section VI Accidental Release Measures

Leak and spill procedures:	Prevent further spill of material, contain material already spilled. Sweep up spilled material for disposal. Flush spill area with fine water spray. CAUTION! Material on wet floor may be slippery.
Personal precautions:	Avoid inhalation of dust and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up. Do not allow the material to become suspended in the air.
Methods for cleaning up:	To limit the production of dust or vapor, cover the product with absorbent granules (inert, non-flammable, and non-combustible). In the case of large spills, install a protective enclosure, cover the sewers. Collect absorbent/product mixture and put it in compatible packaging for subsequent disposal in accordance with the regulations in force. In the case of a large spill, inform the competent authorities if the situation cannot be rapidly and effectively controlled. The absorbent/product mixture shall be handled with the same precautions as the product itself. To clean, wash the contaminated area



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Environmental precautions: making sure not to contaminate the natural environment. During cleaning operations, continue to abide by the handling precautions.
 Avoid release into natural bodies of water, waste water, or in the soil. Contain the leak or spill from spreading if it can be done without any danger. Do not discharge to surface water or to sewers. Inform local authorities if significant leaks cannot be contained.

Section VII Handling and Storage

Handling procedures: No special equipment required. Avoid inhalation of dust. Use only with adequate ventilation. Avoid raising powdered materials into airborne dust.
 Hygiene practices: Follow food GMPs. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.
 Storage: Store in a cool, dry location. Keep container closed. Normal room ventilation satisfactory.

Section VIII Exposure Controls and Personal Protection

Engineering controls: Use only in a well ventilated area. Eyewash fountains and safety showers should be easily accessible.
 Respiratory protection: Provide adequate ventilation. Respirator not normally required. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
 Protective gloves: Avoid skin contact. Wear gloves for extended or repeat skin contact with powder.
 Eye protection: Avoid eye contact. Wear safety goggles with lateral protection while handling powder.
 Clothing: Standard work clothing; wash regularly.

Section IX Physical and Chemical Characteristics

Appearance:	Pink powder	Boiling point:	N/A
Odor:	Berry/fruity	Freezing point:	N/A
Physical state:	Not known	Melting point:	Not known
pH:	Not known	Vapor pressure:	Not known
Solubility in water:	Soluble	Vapor density:	Not known
Density:	Not known		

Section X Stability and Reactivity

Chemical stability: Stable, no decomposition
 Conditions to avoid: Keep away from open flames, hot surfaces, and ignition sources. Do not allow the dust to become suspended in the air; it could produce an explosive atmosphere.
 Materials to avoid: Strong oxidizing agents, strong acids, and strong bases
 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

Section XIV Transportation Information

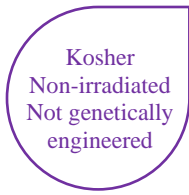
Shipping information: Non-hazardous

Section XV Regulatory Information

Contains no substance on the REACH candidate list.
 Contains no REACH Annex XIV substances.

Section XVI Other Information

Prepared: 11.1.19 Last Revision 11.1.19



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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.

Melanie Bush
Quality Control

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