



## Safety Data Sheet

Material Name: Avi-Lyte™, Product Code: 2062

SDS ID: 2062

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

Avi-Lyte™, Product Code: 2062

**Product Use**

A Vitamin-Mineral Supplement for All Classes of Poultry.

**Restrictions on Use**

Use Only as Directed on Label.

**Details of the supplier of the safety data sheet**

Ralco Nutrition, Inc.  
1600 Hahn Road  
PO Box 1083  
Marshall, MN 56258  
Phone: 1-800-533-5306

### Section 2 - HAZARDS IDENTIFICATION

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 2  
Serious Eye Damage/Eye Irritation - Category 1  
Skin Sensitization - Category 1A  
Reproductive Toxicity - Category 1B  
Specific Target Organ Toxicity - Single Exposure - Category 3

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Causes skin irritation.  
Causes serious eye damage.  
May cause an allergic skin reaction.  
May damage fertility or the unborn child.  
May cause respiratory irritation.

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear protective gloves.



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### Response

IF exposed or concerned: Get medical advice/attention.  
IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN: Wash with plenty of soap and water.  
Take off contaminated clothing and wash before reuse.  
Immediately call a POISON CENTER or doctor.

### Storage

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
77-92-9	Citric acid	40-75
7447-40-7	Potassium chloride	30-50
7647-14-5	Sodium chloride	10-20

## Section 4 - FIRST AID MEASURES

### Description of Necessary Measures

IF exposed or concerned: Get medical advice/attention.

### Inhalation

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

### Skin

IF ON SKIN: Wash with plenty of soap and water.  
Take off contaminated clothing and wash before reuse. Immediately call a POISON CENTER or doctor.

### Eyes

Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.

### Ingestion

Rinse mouth thoroughly with water.

### Most Important Symptoms/Effects

#### Acute

Causes skin irritation.  
Causes serious eye damage.

#### Delayed

May cause an allergic skin reaction.  
May damage fertility or the unborn child.  
May cause respiratory irritation.

### Note to Physicians

Treat symptomatically.



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## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Water spray, carbon dioxide, regular dry chemical, fire-fighting foam.

#### Unsuitable Extinguishing Media

None Known.

### Fire Fighting Measures

Co-ordinate fire-fighting measures to the fire surroundings.

### Special Protective Equipment and Precautions for Firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Use Personal Protective equipment as required.

Avoid breathing dust/fume/gas/mist/vapors/spray.

### Methods and Materials for Containment and Cleaning Up

Collect in closed and suitable containers for disposal.

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Environmental Precautions

None Known.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Use Personal Protective equipment as required.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place.

Keep container tightly closed.

Store locked up.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

<b>Silica, amorphous, precipitated and gel</b>	<b>112926-00-8</b>
OSHA (US):	20 mppcf TWA ; ((80)/(% SiO2) mg/m3 TWA )
Mexico:	10 mg/m3 TWA VLE-PPT



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### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

### Engineering Controls

Sufficient to maintain atmospheric concentrations below applicable regulatory limits.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear eye/face protection.

#### Skin Protection

Wear suitable protective clothing.

#### Respiratory Protection

Use only outdoors or in a well-ventilated area.

Wear respiratory protection.

#### Glove Recommendations

Wear protective gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Powder.	<b>Physical State</b>	Solid.
<b>Odor</b>	Fruity.	<b>Color</b>	Off-white to yellow.
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	Not available
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Not available	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	Not available
<b>Molecular Weight</b>	Not available		



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### Section 10 - STABILITY AND REACTIVITY

#### Reactivity

- Reactive with oxidizing agents, reducing agents, metals, and alkalis.
- Contact with hot nitric acid may cause evolution of toxic nitrosyl chloride.
- Contact with other strong acids may produce irritating hydrogen chloride gas.

#### Chemical Stability

- The product is stable under storage at normal ambient temperatures.

#### Conditions to Avoid

- Avoid contact with incompatible materials.
- High heat can cause decomposition.

#### Incompatible Materials

- Reactive with oxidizing agents, reducing agents, metals, and alkalis.

#### Hazardous decomposition products

- Contact with hot nitric acid may cause evolution of toxic nitrosyl chloride.
- Contact with other strong acids may produce irritating hydrogen chloride gas.

#### Thermal decomposition products

- Can yield oxides of Sulfur when heated above 1000° F.

### Section 11 - TOXICOLOGICAL INFORMATION

#### Information on Likely Routes of Exposure

##### Inhalation

- Yes.

##### Skin Contact

- Yes.

##### Eye Contact

- Yes.

#### Acute and Chronic Toxicity

##### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

##### **Citric acid (77-92-9)**

Oral LD50 Rat 3 g/kg

##### **Potassium chloride (7447-40-7)**

Oral LD50 Rat 2600 mg/kg

##### **Sodium chloride (7647-14-5)**

Oral LD50 Rat 3 g/kg

Inhalation LC50 Rat >42 g/m<sup>3</sup> 1 h

##### **Vitamin A acetate (127-47-9)**

Oral LD50 Rat 4980 mg/kg

##### **Nicotinamide (98-92-0)**

Oral LD50 Rat 3500 mg/kg

Dermal LD50 Rabbit >2000 mg/kg (no deaths occurred)

##### **Vitamin D3 (67-97-0)**

Oral LD50 Rat 42 mg/kg

Dermal LD50 Rat 61 mg/kg (males)

Inhalation LC50 Rat 0.13 - 0.38 mg/L 4 h

##### **Calcium pantothenate (137-08-6)**

Oral LD50 Rat >10 g/kg



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### Product Toxicity Data Acute Toxicity Estimate

Dermal	> 2000 mg/kg
Inhalation - Dust and Mist	> 5 mg/L
Oral	> 2000 mg/kg

### Immediate Effects

No information on significant adverse effects.

### Delayed Effects

No information on significant adverse effects.

### Irritation/Corrosivity Data

No data available.

### Respiratory Sensitization

No data available.

### Dermal Sensitization

No data available.

### Component Carcinogenicity

Menadione sodium bisulfite	130-37-0
IARC:	Monograph 76 [2000] (Group 3 (not classifiable))
Silica, amorphous, precipitated and gel	112926-00-8
IARC:	Monograph 68 [1997] (Group 3 (not classifiable))

### Germ Cell Mutagenicity

No data available.

### Tumorigenic Data

No data available.

### Reproductive Toxicity

No data available.

### Specific Target Organ Toxicity - Single Exposure

No data available.

### Specific Target Organ Toxicity - Repeated Exposure

No data available.

### Aspiration hazard

No data available.

### Medical Conditions Aggravated by Exposure

No data available.



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### Section 12 - ECOLOGICAL INFORMATION

#### Component Analysis - Aquatic Toxicity

<b>Citric acid</b>	<b>77-92-9</b>
Fish:	LC50 96 h Lepomis macrochirus 1516 mg/L [static ]
<b>Potassium chloride</b>	<b>7447-40-7</b>
Fish:	LC50 96 h Lepomis macrochirus 1060 mg/L [static ]; LC50 96 h Pimephales promelas 750 - 1020 mg/L [static ]
Algae:	EC50 72 h Desmodesmus subspicatus 2500 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 825 mg/L IUCLID ; EC50 48 h Daphnia magna 83 mg/L [Static ] EPA
<b>Sodium chloride</b>	<b>7647-14-5</b>
Fish:	LC50 96 h Lepomis macrochirus 5560 - 6080 mg/L [flow-through ]; LC50 96 h Lepomis macrochirus 12946 mg/L [static ]; LC50 96 h Pimephales promelas 6020 - 7070 mg/L [static ]; LC50 96 h Pimephales promelas 7050 mg/L [semi-static ]; LC50 96 h Pimephales promelas 6420 - 6700 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 4747 - 7824 mg/L [flow-through ]
Invertebrate:	EC50 48 h Daphnia magna 1000 mg/L IUCLID ; EC50 48 h Daphnia magna 340.7 - 469.2 mg/L [Static ] EPA
<b>Nicotinamide</b>	<b>98-92-0</b>
Fish:	LC50 96 h Poecilia reticulata >1000 mg/L [static ]

### Section 13 - DISPOSAL CONSIDERATIONS

#### Disposal Methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.



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## Section 14 - TRANSPORT INFORMATION

### US DOT Information:

No Classification assigned.

### International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

<b>Citric acid</b>	<b>77-92-9</b>
IBC Code:	Category Z (<=70% )
<b>Potassium chloride</b>	<b>7447-40-7</b>
IBC Code:	Category Z (solution )

## Section 15 - REGULATORY INFORMATION

### U.S. Federal Regulations

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Reproductive Toxicity; Skin Corrosion/Irritation; Respiratory/Skin Sensitization; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
<b>Silica, amorphous, precipitated and gel</b>	<b>112926-00-8</b>	No	Yes	Yes	Yes	Yes

### Not listed under California Proposition 65

### Canada Regulations

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

<b>Citric acid</b>	<b>77-92-9</b>	<b>1 %</b>
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**Component Analysis - Inventory**  
**Citric acid (77-92-9)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Potassium chloride (7447-40-7)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Sodium chloride (7647-14-5)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes



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### Section 16 - OTHER INFORMATION

#### Summary of Changes

SDS: 06/13/2018

Supersedes: 01/24/2017

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL), KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

#### Other Information

##### Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of Ralco's knowledge, information and belief at the date of preparation. The information provided is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The conditions or methods of said handling, storage, use, and disposal of this product are beyond our control. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expenses arising out of or connected with the handling, storage, use, or disposal of this product. The information provided relates only to the specific material designated, and may not be valid for such material used in combination with any other materials or in any process, unless specified in text.