
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

Marshall, MN 56258

Phone: 1-800-533-5306

Section 2 - HAZARDS IDENTIFICATION

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

Serious Eye Damage/Eye Irritation - Category 1

Skin Sensitization - Category 1A

Reproductive Toxicity - Category 1B

GHS Label Elements**Symbol(s)****Signal Word**

Danger

Hazard Statement(s)

Causes serious eye damage.

May cause allergic skin reaction.

May damage fertility or the unborn child.

Precautionary Statement(s)**Prevention**

Obtain special instructions before use.

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

Wear eye protection/face protection.

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

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

Wear protective gloves.

Response

IF exposed or concerned: Get medical advice/attention.

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.

Wash contaminated clothing before reuse.

Immediately call a POISON CENTER or doctor.

Specific treatment (see label).

Storage

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

Causes serious eye damage.

Inhalation

Avoid breathing dust/fume/gas/mist/vapors/spray. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin

Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth thoroughly with water.

Most Important Symptoms/Effects**Acute**

Causes serious eye damage. May cause allergic skin reaction.

Delayed

May damage fertility or the unborn child.

Note to Physicians

Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media**Suitable Extinguishing Media**

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

Unsuitable Extinguishing Media

No specific measures identified.

Special Hazards Arising from the Chemical

Not available.

Hazardous Combustion Products

Non-flammable.

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. Collect in closed and suitable containers for disposal. Dispose in accordance with all applicable regulations.

Environmental Precautions

None Known.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Use Personal Protective equipment as required. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Store in a dry place. Store in a closed container. Protect from sunlight.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components.

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

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**

Eye glasses with side protection, goggles. Wear face protection.

Skin Protection

Wear suitable protective clothing.

Respiratory Protection

Provide adequate ventilation. Wear respiratory protection.

Glove Recommendations

Wear protective gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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

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.

Possibility of Hazardous Reactions

No data available.

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.

Ingestion

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/m³ 1 h
Vitamin A acetate (127-47-9)
Oral LD50 Rat 4980 mg/kg
Vitamin D3 (67-97-0)
Oral LD50 Rat 42 mg/kg
Nicotinamide (98-92-0)
Oral LD50 Rat 3500 mg/kg
Dermal LD50 Rabbit >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))

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.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

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

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

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

Section 14 - TRANSPORT INFORMATION

US DOT Information:

No Classification assigned.

TDG Information:

No Classification assigned.

Section 15 - REGULATORY INFORMATION
U.S. Federal Regulations

None of this products 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.

U.S. State Regulations

None of this product's components are listed on the state lists from CA, MA, MN, NJ or PA.

Not listed under California Proposition 65
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.

Citric acid	77-92-9
	1 %

Component Analysis - Inventory
Citric acid (77-92-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Potassium chloride (7447-40-7)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Sodium chloride (7647-14-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

Summary of Changes

New SDS: 10/13/2015

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; 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; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; 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; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; 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; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; 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; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

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.