SAFETY DATA SHEETS

This SDS packet was issued with item:

078924223

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078924432

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.03.1993

Revision date: 12.15.2020

Amino Acid Oral Solution

SECTION 1: Identification

Product identifier

Product name: Amino Acid Oral Solution

Product code: 14519423,13122072

Recommended use of the product and restriction on use

Relevant identified uses: A nutritional supplement containing B-complex vitamins, essential amino acids, dextrose and electrolytes.

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Supplier:

United States

Aspen Veterinary Resources Ltd
3155 W. Heartland Drive
Liberty, MO 64068
1-800-792-1238

Emergency telephone number:

United States

CHEMTREC
Within USA and Canada: 1-800-424-9300 (24 hours)
Outside USA and Canada: +1-703-527-3887 (24 hours)

SECTION 2: Hazard(s) identification

GHS classification:

Eye irritation, category 2A

Label elements

Hazard pictograms:

Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation

Precautionary statements:

P264 Wash hands thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 If eye irritation persists: Get medical advice/attention

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 10043-52-4	Calcium chloride	<1
CAS number: 77-92-9	Citric acid	<10
CAS number: 7048-04-6	L-Cysteine, hydrochloride, hydrate	<1
CAS number: 7487-88-9	Magnesium Sulfate	<1
CAS number: 5934-29-2	L-Histidine, hydrochloride, hydrate	<1
CAS number: 79-33-4	L-(+)-lactic acid	<1
CAS number: 99-76-3	Methyl 4-hydroxybenzoate	<1
CAS number: 98-92-0	Nicotinamide	<1
CAS number: 94-13-3	Propyl 4-hydroxybenzoate	<1
CAS number: 57-55-6	Propane-1,2-diol	<1
CAS number: 58-56-0	Pyridoxine hydrochloride	<1
CAS number: 25013-16-5	Butylated hydroxyanisole	<0.001

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.

Ingestion of unusually large amounts may cause vomiting, diarrhea any gastrointestinal upset.

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time).

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards during fire-fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
WEEL	Propane-1,2-diol	57-55-6	8-Hour TWA: 10 mg/m³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before

handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Yellow liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Approximately 100°C / 212°F
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	About 1.01
Solubilities	Soluble in water
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Percent Volatiles	No volatiles present

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

None known.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Calcium chloride	oral	LD50 Rat: 1000 mg/kg
Citric acid	oral	LD50 Mouse: 5400 mg/kg
	dermal	LD50 Rat: > 2000 mg/kg
L-Histidine, hydrochloride, hydrate	oral	LD50 Rat: >2000 mg/kg
L-(+)-lactic acid	oral	LD50 Rat: 3543 mg/kg
	inhalation	LC50 Rat: >7.94 mg/L (4 hours)
	dermal	LD50 Rabbit: >2000 mg/kg
Methyl 4-hydroxybenzoate	oral	LD50 Guinea Pig: 3000 mg/kg
Nicotinamide	oral	LD50 Rat: 3500 mg/kg
Propyl 4-hydroxybenzoate	oral	LD50 Mouse: 6332 mg/kg
Propane-1,2-diol	oral	LD50 Rat: 21000 - 33700 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
Butylated hydroxyanisole	oral	LD50 Mouse: 1100 mg/kg
	dermal	LD50 Rat: >2000 mg/kg

Skin corrosion/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Calcium chloride	Causes skin irritation.
L-Cysteine, hydrochloride, hydrate	Causes skin irritation.
L-(+)-lactic acid	Causes skin irritation.
Methyl 4-hydroxybenzoate	Causes skin irritation.
Propyl 4-hydroxybenzoate	Causes skin irritation.
Butylated hydroxyanisole	Causes skin irritation.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation.

Product data:

No data available.

Substance data:

Name	Result
Calcium chloride	Causes serious eye irritation.
Citric acid	Causes serious eye irritation.
L-Cysteine, hydrochloride, hydrate	Causes serious eye irritation.
L-Histidine, hydrochloride, hydrate	Causes serious eye irritation.
L-(+)-lactic acid	Causes serious eye damage.
Methyl 4-hydroxybenzoate	Causes serious eye irritation.
Nicotinamide	Causes serious eye irritation.
Propyl 4-hydroxybenzoate	Causes serious eye irritation.
Pyridoxine hydrochloride	Causes serious eye damage.
Butylated hydroxyanisole	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Butylated hydroxyanisole	Group 2B
	Group 2B

National Toxicology Program (NTP):

Name	Classification
Butylated hydroxyanisole	Reasonably anticipated to be human carcinogens
	Reasonably anticipated to be human carcinogens

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data:

Name	Result
Butylated hydroxyanisole	Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data:

Name	Result
L-Cysteine, hydrochloride, hydrate	May cause respiratory irritation.
Methyl 4-hydroxybenzoate	May cause respiratory irritation.
Propyl 4-hydroxybenzoate	May cause respiratory irritation.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:
No data available.

Substance data: No data available.

Information on likely routes of exposure:
Eye contact, ingestion and dermal contact.

Symptoms related to the physical, chemical and toxicological characteristics:
Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing. Ingestion of unusually large amounts may cause vomiting, diarrhea any gastrointestinal upset.

Other information:
No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
L-Histidine, hydrochloride, hydrate	EC50 Daphnia magna: 1784 mg/L (48 h)
L-(+)-lactic acid	LC50 Oncorhynchus mykiss: 130 mg/L (96 hours)
	EC50 Daphnia magna: 130 -750 mg/L (48 hours)
	ErC50 Algae: 3500 mg/L (72 hours)

Name	Result
Methyl 4-hydroxybenzoate	LC50 Oryzias latipes: 59.5 mg/L (96 h - semi-static test (OECD) Test Guideline 203))
	EC50 Pseudokirchneriella subcapitata (algae): 91 mg/l mg/L (72 h - static test (ISO 8692) -)
	EC50 Daphnia magna (Water flea): 11.2 mg/L (48 h - static test)
	EC50 Pseudomonas fluorescens : 500 mg/L
Propane-1,2-diol	EC50 Daphnia magna: 43500 mg/L (48 hr)
	LC50 Oncorhynchus mykiss: 40613 mg/L (96 hr)

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	EC50 Selenastrum capricornutum: 18100 mg/L (14 days)

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Citric acid	Readily biodegradable in water (97% degradation after 28 days).
L-(+)-lactic acid	Readily biodegradable.
Propane-1,2-diol	Readily biodegradable (80% degradation in 28 days).
Pyridoxine hydrochloride	This substance is readily biodegradable.
Butylated hydroxyanisole	Inherently biodegradable (34.41% degradation in 28 days).

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Citric acid	Low potential for bioaccumulation (BCF: 3.2 L/kg).
Propane-1,2-diol	Low potential for bioaccumulation (BCF: 0.09).
Butylated hydroxyanisole	Not expected to bioaccumulate (BCF: 21).

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
L-(+)-lactic acid	Koc at 20 °C: 1

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Citric acid	Substance is not PBT

L-Histidine, hydrochloride, hydrate	The substance is not PBT.
L-(+)-lactic acid	Substance is not PBT.
Propane-1,2-diol	The substance is not PBT.
Pyridoxine hydrochloride	This substance is not PBT.
Butylated hydroxyanisole	The substance is not PBT.

vPvB assessment:

Citric acid	Substance is not vPvB
L-Histidine, hydrochloride, hydrate	The substance is not vPvB.
L-(+)-lactic acid	Substance is not vPvB.
Propane-1,2-diol	The substance is not vPvB.
Pyridoxine hydrochloride	This substance is not vPvB.
Butylated hydroxyanisole	The substance is not vPvB.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated

UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

25013-16-5	Butylated hydroxyanisole	Listed

New Jersey Right to Know:

7487-88-9	Magnesium Sulfate	Listed
99-76-3	Methyl 4-hydroxybenzoate	Listed
94-13-3	Propyl 4-hydroxybenzoate	Listed
57-55-6	Propane-1,2-diol	Listed
25013-16-5	Butylated hydroxyanisole	Listed

New York Right to Know:

7487-88-9	Magnesium Sulfate	Listed

Pennsylvania Right to Know:

7487-88-9	Magnesium Sulfate	Listed
99-76-3	Methyl 4-hydroxybenzoate	Listed
94-13-3	Propyl 4-hydroxybenzoate	Listed
57-55-6	Propane-1,2-diol	Listed

California Proposition 65:

⚠**WARNING:** This product can expose you to Butylated hydroxyanisole; which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-0-0
HMIS: 2-0-0
Initial preparation date: 02.03.1993
Revision date: 12.15.2020
Revision Notes:

Revision Date	Notes
2020-12-15	Version 2.

End of Safety Data Sheet