SAFETY DATA SHEET



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Animate ®

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

GHS Product Information

Product Name: Animate ® Business Unit PAHC

Other means of identification: Mineral Feed Supplements

Safety data sheet number: 5003-500 -US-E

Recommended use of the chemical and restrictions on use

Recommended Use: Feed mineral supplement for non-lactating dairy cows.

Uses advised against: No information available

Details of the supplier of the safety data sheet

Manufacturer:

Phibro Animal Health Corporation 229 Radio Road Quincy, IL 62305 Tel: 217-222-8854

Fax: 217-222-5098 Toll Free: 800-677-4623

SDS Contact (email of responsible phibroehs@pahc.com

person):

24 Hour Emergency Phone Number: Chemtrec 1-800-424-9300 (CCN17224)

International: +1 703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation Category 2

Label elements

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Emergency Overview

Warning

Hazard statements

Causes serious eye irritation



Appearance granules

Physical state Solid

Odor Slight

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

IF IN 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

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture

Mixture

Chemical Name	CAS No	Weight-%	Trade Secret
Ammonium chloride	12125-02-9	10 - 30	*

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice: If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least

15 minutes. Keep eye wide open while rinsing.

Inhalation: Remove to fresh air. If symptoms persist, call a physician. Immediate medical attention is

not required. Move to fresh air in case of accidental inhalation of vapors.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician. Immediate medical attention is not required. Wash off immediately with

soap and plenty of water while removing all contaminated clothes and shoes.

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Ingestion: Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT

induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give

anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider: Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media: Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical:

No information available.

Explosion data

Sensitivity to Mechanical

None.

Impact:

Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH

(approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate

personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders: Use personal protection recommended in Section 8. Use personal protective equipment as

required.

Environmental precautions: Prevent entry into waterways, sewers, basements or confined areas. Do not flush into

surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp

to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled

containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush

away traces with water. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

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Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation, especially in confined areas. Use personal protective

equipment as required. Use with local exhaust ventilation. Do not breathe

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

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep container tightly closed. Keep out of the reach of children. Keep containers tightly

closed in a cool, well-ventilated place. Keep in properly labeled containers.

Incompatible materials: None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	CAS No	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium chloride	12125-02-9	STEL: 20 mg/m³ fume TWA: 10 mg/m³ fume	(vacated) TWA: 10 mg/m³ fume (vacated) STEL: 20 mg/m³ fume	TWA: 10 mg/m³ fume STEL: 20 mg/m³ fume

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962

(11th Cir., 1992).

Appropriate engineering controls

Engineering Controls: Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

General Hygiene Considerations: When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular

cleaning of equipment, work area and clothing is recommended.

Eye/face protection: Tight sealing safety goggles. Face protection shield.

Skin and body protection: No special technical protective measures are necessary.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Solid

AppearancegranulesColorTan

Odor Odor threshold

No information available

Slight

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

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pH No information available
Melting Point / Freezing Point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
Flammability Limit in Air

No information available
No information available
No information available

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available **Specific Gravity** No information available Water solubility No information available Solubility in other solvents No information available No information available Partition coefficient **Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available Dynamic viscosity No information available No information available **Explosive properties Oxidizing properties** No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
Bulk density
Percent Volatile
No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information: No data available

Inhalation: No data available.

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Eye contact: No data available.

Skin Contact: No data available.

Ingestion: No data available.

Chemical Name	CAS No	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium chloride	12125-02-9	= 1410 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms: No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization:No information available.Germ cell mutagenicity:No information available.Carcinogenicity:No information available.

Reproductive toxicity:
STOT - single exposure:
STOT - repeated exposure:
Chronic toxicity:
Target Organ Effects:
Aspiration hazard:
No information available.
No information available.
Avoid repeated exposure.
Eyes, Respiratory system, Skin.
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document . mg/kg 18311

12. ECOLOGICAL INFORMATION

Ecotoxicity

60% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	CAS No	Algae/aquatic plants	Fish	Crustacea
Ammonium chloride	12125-02-9	-	209: 96 h Cyprinus carpio mg/L LC50 static 725: 24 h Lepomis macrochirus mg/L LC50	202: 24 h Daphnia magna mg/L LC50
Magnesium sulfate	7487-88-9	2700: 72 h Desmodesmus subspicatus mg/L EC50	19000: 24 h Lepomis macrochirus mg/L LC50 static 2610 - 3080: 96 h Pimephales promelas mg/L LC50 static	1700: 24 h Daphnia magna mg/L EC50 266.4 - 417.3: 48 h Daphnia magna mg/L EC50 Static
Calcium sulfate	7778-18-9	-	2980: 96 h Lepomis macrochirus mg/L LC50 static 1970: 96 h Pimephales promelas mg/L LC50 static	3200: 120 h Nitscheria linearis mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects: No information available

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13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Refer to all federal, state and local regulations prior to disposal of container and unused

contents by reuse, recycle or disposal. Disposal should be in accordance with applicable regional, national and local laws and regulations. Avoid runoff to waterways and sewers. Recover or recycle if possible. Send to a licensed recycler, reclaimer or incinerator.

Disposal methods: Do not reuse container.

14. TRANSPORT INFORMATION

Note: Store in a closed container. Keep container upright.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Not Determined TSCA: DSL/NDSL: Not Determined **EINECS/ELINCS:** Not Determined **ENCS:** Not Determined **IECSC:** Not Determined **KECL:** Not Determined PICCS: Not Determined Not Determined AICS:

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	SARA 313 - Threshold Values %	
Ammonium chloride	12125-02-9	1.0	

SARA 311/312 Hazard Categories

Acute health hazard Yes

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Chronic Health HazardNoFire hazardNoSudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CAS No	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium chloride	12125-02-9	5000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	CAS No	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium chloride	12125-02-9	5000 lb	-	RQ 5000 lb final RQ
				RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

No information available

Chemical Name	CAS No	New Jersey	Massachusetts	Pennsylvania
Ammonium chloride	12125-02-9	X	X	X
Calcium sulfate	7778-18-9	X	X	X

Canada

No information available

16. OTHER INFORMATION

NFPA Health hazards 2 Flammability 0 Instability 0 Physical & Chemical

Properties 0

HMIS Health hazards *2 Flammability 0 Physical hazards 0 Personal protection B

Document Review

Revision Number: 4

Revision Note: No information available

Key or legend to abbreviations and acronyms used in the

safety data sheet:

Bioconcentration factor (BCF)

International Air Transport Association (IATA)

Globally Harmonized System (GHS)

International Maritime Dangerous Goods (IMDG)

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End of Safety Data Sheet