SAFETY DATA SHEETS

This SDS packet was issued with item:

078043487

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078043495

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).

078043503 078043529

WILL NOT OCCUR

None known

MATERIAL SAFETY DATA SHEET

Hazardous Polymerization

Conditions to Avoid:

Identity:Product Name: Uroeze® Tablet or PowderPageProduct Code 852100, 852500, 854004, 854100, 854500

Supplier Info	rmation:		Emergency Tele	nhone Number		
Supplier Information:						
Name:	VIRBAC CORP. (Virbac A Allerderm [®] , Francodex [®] , M JON [®] , PMResources, Zem	1ardel [®] , St.	Other emerger	: Chemtrec 800- ncies: ON CONTROL (11
Address: City: State:	P. O. BOX 162059 FORT WORTH TX 76161		Telephone Num	ber for Information t Virbac: 800/338		
Section II -	· Hazardous Ingredients/Id	entity Informat	ion			
Hazardous C (Special Che	Components emical Identification; Common N	OSHA PEL lame)	ACGIH TLV	STEL	CAS #	% (opt.)
(OSHA) Haz conditions of	blets and Powder are exempt fr ard Communication Standard (f use, these formed products are	29CFR1910.1200). These products	are exempt by OS	HA because, u	nder norma
setting. Ammoniu	ım Chloride	Not Applicable	Not Applicable	Not Applicable	2125-02-9	
Boiling Point Specific Grav Vapor Press Melting Poin Vapor Densi	vity $(H_2O = 1)$: ure (mm Hg): t: ty (AIR = 1): Rate (Butyl Acetate = 1): Water:	Not Applie Not Applie Not Applie Not Applie Not Applie Not Applie Soluble Tablet or	cable cable cable cable cable			
			powder			
Section IV	- Fire and Explosion Haza	rd Data				
Flash Point (Flammable I	(Method Used): Limits:		cable Applicable Applicable			
Extinguishin	g Media:	Water spr	ay, dry chemical, can a fire and material		oam suitable fo	r the
	fighting Procedures: and Explosion Hazards:	Not Applie Not Applie	cable.			
Section V ·	- Reactivity Data					
	ity Decomposition or Byproducts:		to Avoid): Strong A , Hydrogen Chloride		s, Strong oxidiz	ing agents

MSDS

Page 1 of 2

Obtained by Global Safety Management, www.GSMSDS.com, 877-683-7460

MATERIAL SAFETY DATA SHEET

Identity: Product Name: Uroeze® Tablet or Powder Product Code 852100, 852500, 854004, 854100, 854500

Section VI - Health Hazard Data				
Routes of Entry:	Inhalation? NC	D Skin? NO	Ingestion? Yes	
Health Hazards (Acu	te and Chronic): May	be irritating to respiratory system, skin and	d eyes.	
Carcinogenicity:	NTP? NO	IARC Monographs? NO	OSHA Regulated? NO	
Signs and Symptoms of Exposure: None presently known.				
Medical Conditions Generally Aggravated by Exposure: None presently known				
Emergency and First Aid ProceduresINGESTED:If large quantities are swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center.SKIN CONTACT:Wash affected areas promptly and thoroughly with soap and water. Rinse thoroughly.				
If irritation occurs, get medical attention.EYE CONTACT:Immediately rinse eyes with water for a minimum of 15 minutes holding eye open. Remove contact lenses, if present, after the first 5 minutes. Call a physician if irritation persists.INHALATION:Not Applicable				
Note to Physician:				

Section VII - Precautions for Safe Handling and Use	
Steps to be Taken in Case Material is Released or Spilled:	Vacuum or sweep up spillage, place in a bag or appropriate container and hold for waste disposal. Ventilate area and wash spill site after spillage is picked up completely.
Waste Disposal Method:	Dispose of in accordance with all applicable federal, state, and local laws.
Precautions to be Taken in Handling or Storage:	Store tightly sealed in the original container at controlled room temperature not to exceed 25°C (77°F).
Other Precautions:	Keep out of the reach of children.

Section VIII - Control Measures			
Respiratory Protection:	Not necessary under recommended conditions of use.		
Ventilation	Local Exhaust:	Not Applicable	
	Special:	Not Applicable	
	Mechanical (General):	Not Applicable	
Protective Gloves:		Rubber gloves for prolonged or repeated exposure.	
Eye Protection:		Not necessary under recommended conditions of use.	
Other Protective Clothing or Equipment:		None required.	
Work/Hygienic Practices:		Read and follow directions on product label.	

Section IX - Additional Information

Uroeze, ALLERDERM and St. JON are registered trademarks of Virbac AH, Inc. Francodex is a registered trademarks of VBSA. Mardel and Zema are registered trademarks of Virbac Corporation.

Disclaimer of Expressed and Implied Warranties: This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

Prepared by Regulatory Affairs. New MSDS Dated: August 23, 2006 Supersedes MSDS Date: September 19, 2003 MSDS # 3510-267

Page 2 of 2



MATERIAL SAFETY DATA SHEET UROEZE[®] Urinary Supplement Powder Product Code: 854004

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

Product Name	UROEZE [®] Urinary Supplement Powder
Product Description	Urinary acidifier for cats and dogs
Manufacturer/Supplier	Virbac AH, Inc.
Address	P.O. Box 162059
	Fort Worth, Texas 76161
Phone Number	(800) 338-3659
Chemtrec Number (24 hour)	(800) 424-9300
Other Emergency Numbers:	Poison Control Center: 1-800-222-1222
MSDS Revision Date:	June 15, 2011
Supersedes MSDS Dated:	March 19, 2009

Material Safety Data Sheet in compliance with OSHA's Hazcom Standard (29 CFR 1910.1200)

2. HAZARDS IDENTIFICATION

Emergency Overview CAUTION! May cause adverse gastrointestinal effects. Keep out of reach of children.

Routes of Entry

Eye contact - Skin contact - Inhalation - Ingestion

Carcinogenic Status

Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs

Eye - Gastrointestinal Tract

Health Effects - Eyes

Contact may cause eye irritation.

Health Effects - Skin

Contact with skin is not expected to cause adverse effects.

Health Effects - Ingestion

Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting and diarrhea.

Health Effects - Inhalation

Inhalation may irritate respiratory tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name Ammonium Chloride CAS Number 12125-02-9

Concentration 55 - 65%

4. FIRST AID MEASURES

Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.



4. FIRST AID MEASURES

Skin

Wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

Ingestion

Contact a physician immediately if ingested. Physician may call a poison control center for advice concerning human ingestion.

Inhalation

Not applicable

Advice to Physicians

Federal (U.S.A.) law restricts this drug to use by or on the order of a licensed veterinarian.

5. FIRE - FIGHTING MEASURES

Extinguishing Media

Use extinguishing media appropriate for surrounding materials.

Unusual Fire and Explosion Hazards

Can release hazardous vapors during a fire.

Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Sweep and dispose of small amounts in trash. Large amounts should be disposed of in a sanitary landfill.

7. HANDLING AND STORAGE

Store in original container at temperatures between 59°F and 86°F (15°C - 30° C). Keep out of sunlight. Keep away from children. Wash hands after dispensing and before eating, drinking or smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards Exposure limits are listed below, if they exist. Ammonium Chloride (as fume) ACGIH: TLV 10 mg/m³ 8h TWA 15 min STEL 20 mg/m³ Engineering Control Measures No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels. Respiratory Protection Not required under normal conditions of use. Hand Protection Not required under normal conditions of use. Workers should wash hands before eating, drinking or smoking. Eye Protection Not required under normal conditions of use.

Body Protection

Normal work wear.



MATERIAL SAFETY DATA SHEET UROEZE[®] Urinary Supplement Powder Product Code: 854004

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid (powder)
Color	Brown/white mix
Odor	None
рН	Not applicable
Specific Gravity	No data available
Boiling Range/Point (°C/F)	Not applicable
Melting Point (°C/F)	Not applicable
Flash Point (PMCC) (°C/F)	Not flammable
Explosion Limits (%)	No data available
Vapor Pressure	Not applicable
Density	No data available
Solubility in Water	No data available
Vapor Density (Air = 1)	Not applicable

10. STABILITY AND REACTIVITY

 Stability

 Stable under normal conditions.

 Conditions to Avoid

 Heat - high temperatures

 Materials to Avoid

 Strong acids - strong bases - strong oxidizing agents

 Hazardous Polymerization

 Will not occur.

 Hazardous Decomposition Products

 Oxides of carbon - hydrogen chloride - ammonia - nitrous oxides

11. TOXICOLOGICAL INFORMATION

See product insert and/or packaging for additional information. Acute Toxicity Ammonium Chloride: LD50 (rat) 1650 mg/kg Specific Target Organ Systemic Toxicity (single and repeat) No relevant studies identified. Serious Eye damage/Eye Irritation Ammonium Chloride: Eye irritation, rabbit **Skin Corrosion/Irritation** Ammonium Chloride:: No skin irritation, rabbit **Respiratory or Skin Sensitization** This product may cause a reaction in individuals with pork allergies. This product contains glycerides and in rare cases glycerides may cause allergic reaction upon prolonged or repeated contact. Ammonium Chloride: Not sensitizing to skin (guinea pig) Carcinogenicity Not considered carcinogenic by NTP, IARC, and OSHA. Germ Cell Mutagenicity Ammonium Chloride: Negative Ames test with and without metabolic activation, Positive cytogenetic assay without metabolic activation



11. TOXICOLOGICAL INFORMATION

Toxicity to Reproduction

No relevant studies identified.

12. ECOLOGICAL INFORMATION

Mobility

No relevant studies identified. Persistence/Degradability No relevant studies identified. Bio-accumulation No relevant studies identified. Ecotoxicity Ammonium Chloride: LC50 (rainbow trout) 3.98 mg/l 96 h LC50 (daphnia magna) 161 mg/l 48hr

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. REGULATORY INFORMATION

US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS TSCA Listing

This product contains ingredients that have not been verified for listing on the EPA Toxic Substance Control Act Chemical Substance (TSCA) Inventory.

DSL (Canadian) Listing

This product contains ingredients that have not been verified for listing on the Domestic Substance List (DSL).

WHMIS Classification

D.2.B

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

MA Right To Know Law

This product contains the following chemicals on the Massachusetts Right to Know Law: Ammonium Chloride (12125-02-9).

PA Right To Know Law

This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Ammonium Chloride (12125-02-9).

NJ Right To Know Law

This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: Ammonium Chloride (12125-02-9).

California Proposition 65

This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: None.

SARA Title III Sect. 311/312 Categorization

Immediate (acute)



15. **REGULATORY INFORMATION**

SARA Title III Sect. 313

This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: Ammonium Chloride (12125-02-9).

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 0 NFPA Code for Health - 1 NFPA Code for Reactivity - 0 NFPA Code for Special Hazards – 0

HMIS Ratings

HMIS Code for Flammability - 0 HMIS Code for Health - 1 HMIS Code for Reactivity - 0 HMIS Code for Personal Protection - See Section 8

Abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists BOD: Biological Oxygen Demand CAS#: Chemical Abstracts Service Number FIFRA: Federal Insecticide, Fungicide and Rodenticide Act IARC: International Agency for Research on Cancer LC50: Lethal Concentration 50% LD50: Lethal Dose 50% N/A: Denotes no applicable information found or available NTP: National Toxicology Program OSHA: Occupational Safety and Health Administration PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value TSCA: Toxic Substance Control Act

For further Information call:(800) 338-3659Prepared By:EnviroNet LLC

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The information and recommendations presented in this MSDS are based on sources believed to be accurate. Virbac AH, Inc. assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.



1. IDENTIFICATION

Product Name Recommended use of the chemical and restrictions on use	UROEZE [®] 400 (Urinary Supplement Powder)		
Identified uses	Urinary acidifier for cats and dogs		
Restrictions on Use	Federal law restricts this drug to use by or on the order of a licensed veterinarian.		
Company Identification	Virbac AH, Inc.		
	P.O. Box 162059		
	Fort Worth, Texas 76161		
Customer Information Number	(800) 338-3659		
Emergency Telephone Number			
CHEMTREC Number	(800) 424-9300		
Other Emergency Number:	Poison Control Center: 1-800-222-1222 (human) HOT LINE NUMBER: 1-800-345-4735 (human and pet)		
Issue Date	September 18, 2015		
Supersedes Date	June 15, 2011		
Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally			

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification

Eye Damage/Irritation – Category 2A Sensitization - Respiratory – Category 1

Label Elements

Hazard Symbols



Signal Word: Danger

Hazard Statements

Causes serious eye irritation. May cause allergy or asthma or breathing difficulties if inhaled.

Precautionary Statements

Prevention

Wash hands thoroughly after handling. Wear eye protection/face protection. Avoid breathing dust. In case of inadequate ventilation wear respiratory protection.



2. HAZARD IDENTIFICATION

Response

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.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a poison center or doctor.

Storage

None Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

None

Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	30 - 40%
Acute dermal toxicity	30 - 40%
Acute inhalation toxicity	30 - 40%
Acute aquatic toxicity	30 - 40%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:

This product is a mixture.

Component Name	CAS Number	Concentration
Ammonium Chloride	12125-02-9	55 - 65%
Desiccated Beef Liver	NA	15 - 25%

4. FIRST - AID MEASURES

Description of necessary first-aid measures

Eyes

Immediately flood the eye with plenty of water, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

If irritation develops wash skin thoroughly with soap and water. Obtain medical attention if redness or soreness persists.

Ingestion

Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation

Remove person to fresh air. Seek medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Revision Date: September 18, 2015



4. FIRST - AID MEASURES

Indication of immediate medical attention and special treatment needed

Notes to Physicians

Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Extinguishing Media

Use extinguishing media appropriate for surrounding materials.

Unusual Fire and Explosion Hazards

This product is a powder and if significant amounts are suspended in air may pose an explosion risk during a fire.

Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing.

Environmental Precautions

Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up

Sweep up and dispose of small amounts in trash. Large amounts should be disposed of in a sanitary landfill. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear appropriate protective clothing. Wash hands thoroughly after handling.

Conditions for safe storage

Store in original container at controlled room temperature of 59°- 86° F (15°-30°C) away from children and pets.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Ammonium Chloride (as fume)

ACGIH: TLV 10 mg/m³ 8h TWA 15 min STEL 20 mg/m³

Appropriate engineering controls

No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

Revision Date: September 18, 2015



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Individual protection measures Respiratory Protection Not required under normal conditions of use. Skin Protection Not required under normal conditions of use. Eye/Face Protection Safety glasses or goggles. Body Protection Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Solid (powder)
Color	Brown/white mix
Odor	None
Odor Threshold	No data available
рН	No data available
Specific gravity	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	Not flammable
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	No data available
Vapor Density (Air = 1)	No data available
VOC	No data available
Partition coefficient (n-	Not applicable
octanol/water)	
Viscosity	Not applicable
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	No data available

10. STABILITY AND REACTIVITY

Reactivity

Data is not available

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Heat - high temperatures



10. STABILITY AND REACTIVITY

Incompatible Materials

Strong oxidizers – strong acids – strong bases

Hazardous Decomposition Products

Oxides of carbon - hydrogen chloride - ammonia - nitrous oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ammonium Chloride: LD50 Oral (rat) 1410mg/kg

Specific Target Organ Toxicity (STOT) – single exposure

Ammonium chloride: Available data indicates this ingredient is not expected to cause target organ effects after a single exposure.

Specific Target Organ Toxicity (STOT) - repeat exposure

Ammonium chloride: Available data indicates this ingredient is not expected to cause target organ effects after repeated exposure.

Serious Eye damage/Irritation

Ammonium chloride: Classified as irritating to eyes based on animal studies.

Skin Corrosion/Irritation

Ammonium chloride: Available data indicates this ingredient is not expected to cause skin irritation.

Respiratory or Skin Sensitization

Desiccated Beef Liver: May cause allergy or asthma or breathing difficulties if inhaled.

Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity

Ammonium chloride: Available data indicates this ingredient is not expected to be mutagenic.

Reproductive Toxicity

Ammonium chloride: Available data indicates this ingredient is not expected to cause reproductive toxicity or birth defects.

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<u>Ammonium Chloride:</u> LC50 (Fathead minnow) 196 mg/l 96 h LC50 (Daphnia magna) 101 mg/l 48hr

Revision Date: September 18, 2015



Mobility in soil

No relevant studies identified.

12. ECOLOGICAL INFORMATION

Persistence/Degradability

No relevant studies identified.

Bioaccumulative Potential

No relevant studies identified.

Other adverse effects

No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. **REGULATORY INFORMATION**

United States TSCA Inventory

This product is a drug and therefore is not regulated under the US EPA Toxic Substance Control Act.

Canada DSL Inventory

This product is a drug and therefore is not regulated under the Canadian Environmental Protection Act.

California Proposition 65

This product does not contain any materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

SARA Title III Sect. 311/312 Categorization

Immediate (acute) Health Hazard

SARA Title III Sect. 313

This product contains a chemical that is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: Ammonium Chloride



16. OTHER INFORMATION

Legend

ACGIH: American Conference of Governmental Industrial Hygienists BOD: Biological Oxygen Demand CAS#: Chemical Abstracts Service Number ECHA: European Chemicals Agency FIFRA: Federal Insecticide, Fungicide and Rodenticide Act IARC: International Agency for Research on Cancer LC50: Lethal Concentration 50% LD50: Lethal Dose 50%

16. OTHER INFORMATION

Legend

N/A: Denotes no applicable information found or available NTP: National Toxicology Program OSHA: Occupational Safety and Health Administration PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value TSCA: Toxic Substance Control Act

Revision Date: September 18, 2015 Replaces: June 15, 2011 Changes made: Update to GHS.

Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By:

EnviroNet LLC.

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