SAFETY DATA SHEETS

This SDS packet was issued with item:

078358412

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

078358420

MATERIAL SAFETY DATA SHEET
KERATOLUX® Tar Free Medicated Shampoo with SPHERULITES® Microcapsules ANTI-IRRITANT ANTI-ADHESIVE TECHNOLOGY®
Product Codes: 002008 and 002116

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

Product Name	KERATOLUX® Tar Free Medicated Shampoo with SPHERULITES® Microcapsules ANTI-IRRITANT ANTI-ADHESIVE TECHNOLOGY®
Product Description	Shampoo for dogs, cats, and horses
Manufacturer/Supplier	Virbac AH, Inc.
Address	P.O. Box 162059
	Fort Worth, Texas 76161
Phone Number	(800) 338-3659 for Technical Support
Chemtrec Number (24 hour)	(800) 424-9300
Emergency Number:	(800) 338-3659 for Human and Animal Medical Emergencies
MSDS Revision Date:	March 7, 2011
Supersedes MSDS Dated:	May 10, 2010

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

2. HAZARDS IDENTIFICATION

Emergency Overview
CAUTION!
Avoid contact with eyes and skin.
Harmful if swallowed.
Keep out of reach of children.
Read entire label before each use.

Routes of Entry
Eye contact - Skin contact - Ingestion - Inhalation - Absorption

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs
Eyes - Skin - Respiratory System - Reproductive System

Health Effects - Eyes
Contact with eyes can cause irritation.

Health Effects - Skin
Contact with skin can cause irritation.

Health Effects - Ingestion
Harmful if swallowed. Ingestion of this material may cause gastrointestinal effects such as nausea, vomiting, diarrhea, abdominal cramps and constipation. Prolonged, repeated ingestion can cause adverse reproductive effects.

Health Effects - Inhalation
No adverse effects are expected during normal conditions of use. Prolonged, repeated exposure may cause irritation to the respiratory tract and adverse reproductive effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	Concentration
Zinc Glutonate	4468-02-4	~0.5%
Pyridoxine HCL	58-56-0	~0.5%

Obtained by Global Safety Management, www.globalsafetynet.com (877) 683-7460

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	Concentration
Salicylic Acid	69-72-7	~0.86%
Surfactant	N/A	1 - 10%
Detergent blend	N/A	1 - 10%
Sodium Chloride	7647-14-5	≤ 1%
Cocamidopropyl betaine	61789-40-0	1 - 5 %
Citric Acid	77-92-9	≤ 1%
Polyethylene Glycol	25322-68-3	≤ 1%

4. FIRST AID MEASURES

Eyes
Immediately flood the eye with plenty of water for at least 15-20 minutes, 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.

Advice to Physicians
Treat symptomatically.

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

Wear appropriate protective clothing. Wipe up and transfer into suitable containers for recovery or disposal. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Store in original container in a cool, dry place. Store away from children and pets. Do not store near foodstuffs. Do not contaminate water, food or feed by storage. Wear appropriate protective clothing. Avoid contact with skin, eyes and clothing. Wash and remove contaminated clothing before reuse. Avoid breathing vapors. Wash hands thoroughly after handling and before eating, drinking or smoking.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards
Exposure limits are listed below, if they exist.
Salicylic Acid
None established
Zinc Glutonate
None established
Pyridoxine HCL
None established
Surfactant
None established
Detergent blend
None established
Sodium Chloride
None established
Cocamidopropyl Betaine
None established
Polyethylene Glycol
None established
Citric Acid
None established
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. Professional groomers and those with repeated and extended exposures should consider the use of respiratory protection if there is a risk of exposure to high vapor concentrations or aerosols. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Hand Protection
Elbow length chemical resistant gloves.
Eye Protection
Safety glasses or goggles.
Body Protection
Waterproof apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	White to yellow
Odor	Camphor
pH	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
Explosion Limits (%)	No data available
Vapor Pressure	No data available
Density	No data available

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9. PHYSICAL AND CHEMICAL PROPERTIES

Solubility in Water	Soluble
Vapor Density (Air = 1)	No data available

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.
Conditions to Avoid
Heat - high temperatures
Materials to Avoid
Strong oxidizers – strong acids
Hazardous Polymerization
Will not occur.
Hazardous Decomposition Products
Oxides of carbon - oxides of sulfur - acrolein - nitrogen - ammonia - hydrocarbons - alcohols - ethers - carboxylic acids

11. TOXICOLOGICAL INFORMATION

See product packaging for additional information.
Acute Toxicity
Cocamidopropyl betaine: Oral LD50 (rat) 5000 mg/kg
Salicylic acid: Oral LD50 (rat) 891 mg/kg, Dermal LD50 (rabbit) >10,000 mg/kg, Inhalation LC50 >900 mg/m^3 (rat)
Pyridoxine HCL: Oral LD50 (rat) 4000mg/kg
Specific Target Organ Systemic Toxicity (single and repeat)
Cocamidopropyl betaine: 28 day Subchronic Toxicity Study (rat) (doses: 100, 500, 1000 mg/kg): No adverse effects observed at 100 mg/kg
Salicylic acid: Chronic exposure may cause adverse effects to the central nervous system, lungs, kidneys and liver. Skin absorption of salicylic acid may enhance the symptoms of ingestion.
Serious Eye damage/Eye Irritation
Salicylic acid: Severe eye irritant (rabbit)
Cocamidopropyl betaine: Causes moderate eye (Primary Eye Irritation - rabbit)
Skin Corrosion/Irritation
Salicylic acid: Slightly irritating (rabbit)
Cocamidopropyl betaine: Causes mild skin irritation (Primary Skin Irritation - rabbit)
Respiratory or Skin Sensitization
Salicylic acid: May cause allergic reactions in people with aspirin sensitivities and asthma.
Cocamidopropyl betaine: No evidence of delayed contact hypersensitivity (guinea pig- Delayed Contact Sensitization Study) or sensitization (Human Patch Test)
Carcinogenicity
Cocamidopropyl betaine: Not a carcinogen (Carcinogenicity Study- dermal - mice -20 months)
Germ Cell Mutagenicity
Salicylic acid: Not mutagenic in laboratory studies.
Cocamidopropyl betaine: Not mutagenic (Ames test and Mouse Micronuclear Assay)
Toxicity to Reproduction
Salicylic acid: Based on animal feeding studies, may cause reproductive and developmental abnormalities.

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12. ECOLOGICAL INFORMATION

Mobility
No relevant studies identified.
Persistence/Degradability
No relevant studies identified.
Bio-accumulation
No relevant studies identified.
Ecotoxicity
Salicylic acid: EC50 fresh water algae 100 mg/l 72 hr, EC50 Daphnia 180 mg/l 24hr

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 are not listed 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: None

PA Right To Know Law
This product contains the following chemicals on the Pennsylvania Hazardous Substance List: None

NJ Right To Know Law
This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: None

California Proposition 65
This product contains the following chemicals which the State of California has found to cause cancer, birth defects or other reproductive harm: Ethylene oxide (75-21-8) trace – 1,4 Dioxane (123-91-1) trace

SARA Title III Sect. 311/312 Categorization
Immediate (acute) Delayed (Chronic)

SARA Title III Sect. 313
This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations: None

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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) 338-3659

Prepared By: EnviroNet LLC

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SAFETY DATA SHEET
KERATOLUX®
(Piroctone Olamine)
Medicated Shampoo for Dogs and Cats

1. IDENTIFICATION

Product Name	KERATOLUX® (Piroctone Olamine) Medicated Shampoo for Dogs and Cats
Recommended use of the chemical and restrictions on use	
Identified uses	Medicated shampoo for dogs and cats
Restrictions on Use	For animal use only. For external use only. Not for otic use.
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	July 30, 2018
Supersedes Date	December 16, 2016 (KERATOLUX® Tar Free Medicated Shampoo with SPHERULITES® Microcapsules)

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. HAZARDS IDENTIFICATION

Hazard Classification
Eye Damage/Irritation - Category 1
Skin Corrosion/Irritation - Category 2

Label Elements
Hazard Symbols

Signal Word: Danger

Hazard Statements
Causes serious eye damage.
Causes skin irritation.

Precautionary Statements
Prevention
Wear eye protection/face protection.
Wash hands thoroughly after handling.
Response
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
If on skin: wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
If skin irritation occurs, get medical advice/attention.

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2. HAZARDS IDENTIFICATION

Storage
None
Disposal
None
Other Hazards
None

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

Acute oral toxicity	35 - 45%
Acute dermal toxicity	35 - 45%
Acute inhalation toxicity	35 - 45%
Acute aquatic toxicity	35 - 45%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:
This product is a mixture.

Component Name	CAS Number	Concentration
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts	68585-34-2	3 - 7 %
1-Dodecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt	683-10-3	3 - 7%
1-Tetradecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt	2601-33-4	1 - 5%
Glycerin	56-81-5	1 - 5%
Piroctone Olamine	68890-66-4	0.1- 1.0%
Acetic acid, 2-hydrox-,sodium salt (1:1)	2836-32-0	0.1- 1.0%

4. FIRST AID MEASURES

Description of necessary first-aid measures
Eyes
Immediately flood the eye with plenty of water for at least 15-20 minutes, 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.

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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
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

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
Wipe up and transfer into suitable containers for recovery or disposal. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Precautions for safe handling
Wear appropriate protective clothing. Avoid contact with eyes. Wash hands thoroughly after handling and before eating, drinking or smoking.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts
None established.
1-Dodecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt
None established.
1-Tetradecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt
None established.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Glycerin (Mist)
ACGIH: TLV 10 mg/m^3 8h TWA.
OSHA: PEL 5 mg/m^3 8h TWA respirable fraction
15mg/m^3 8h TWA total dust
Piroctone Olamine
None established.
Acetic acid, 2-hydrox-,sodium salt (1:1)
None established.

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

Individual protection measures
Respiratory Protection
Not required under normal conditions of use. Professional groomers and those with repeated and extended exposures should consider the use of respiratory protection if there is a risk of exposure to high vapor concentrations or aerosols. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.
Skin Protection
Chemical resistant gloves.
Eye/Face Protection
Safety glasses with side shields or goggles.
Body Protection
Waterproof apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical State	Liquid (gel)
Color	Clear Light yellow
Odor	None
Odor Threshold	No data available
pH	4.5 - 6
Density	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	Soluble
Vapor Density (Air = 1)	No data available
VOC	No data available
Partition coefficient (n-octanol/water)	Not applicable
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

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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

Incompatible Materials
Strong oxidizers – strong acids

Hazardous Decomposition Products
Oxides of carbon – aldehydes – sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
No relevant studies identified.

Specific Target Organ Toxicity (STOT) – single exposure
Available data indicates this product is not expected to cause target organ effects after a single exposure.

Specific Target Organ Toxicity (STOT) – repeat exposure
Available data indicates this product is not expected to cause target organ effects after repeated exposure.

Serious Eye damage/Irritation
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts: Causes serious eye irritation.
1-Dodecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt: Severely irritating to eyes in rabbit studies.
1-Tetradecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt: Severely irritating to eyes in rabbit studies.
Piroctone Olamine: Risk of serious damage to eyes.
Acetic acid, 2-hydrox-,sodium salt (1:1): Causes serious eye damage.

Skin Corrosion/Irritation
Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-hydroxy-, C10-16-alkyl ethers, sodium salts: Causes skin irritation.
1-Dodecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt: Causes skin irritation.
1-Tetradecanaminium, N-(carboxymethyl)-N,N-dimethyl-, inner salt**:** Causes skin irritation.

Respiratory or Skin Sensitization
Available data indicates this product is not expected to cause skin sensitization.

Carcinogenicity
Not considered carcinogenic by NTP, IARC, and OSHA.

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11. TOXICOLOGICAL INFORMATION

Germ Cell Mutagenicity
Available data indicates this product is not expected to be mutagenic.

Reproductive Toxicity
Available data indicates this product is not expected to cause reproductive toxicity or birth defects.

Aspiration Hazard
Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity
No relevant studies identified.

Mobility in soil
No relevant studies identified.

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 excluded from the US EPA Toxic Substance Control Act and is regulated under the Food, Drug and Cosmetic Act.

SARA Title III Sect. 311/312 Categorization
Serious eye damage – Skin irritation

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: None

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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%
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: July 30, 2018
Replaces: December 16, 2016
Changes made: Reformulated, product name change and classification change.

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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