

SAFETY DATA SHEET

AERIS GUARD BIOACTIVE COIL TREATMENT

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product form : Liquid Mixture in aerosol can

Trade name : AERIS GUARD BIOACTIVE COIL TREATMENT

Product code : 01-02-00005

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant identified uses

An enzymatic detergent for use in cleaning air conditioning heat exchange coils.

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the Safety Data Sheet

Supplier:

Aeris Environmental Ltd, 5/26-34 Dunning Ave, Rosebery, NSW 2018, Australia

1.4 Emergency telephone number

For emergency event of spillage, inhalation or ingestion of products, please contact the emergency hotline:

Australia: +61 2 83441315

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 According to GHS classification:

Physical hazard:

Flammable Aerosol category 1.

Health Hazard:

Eye irritation category 2

Skin irritation category 2

Environmental hazard:

Aquatic acute category 3

2.1.2 According to NOHSC

Flammable gas, eye irritation.

2.2 Label elements

Labelling according to GHS

Hazard pictograms:

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<u>Signal word</u>: DANGER Hazard statements:

H222 Extremely flammable aerosol

H229 Pressurised container: May burst if heated

H319 Causes serious eye irritation

H315 Causes skin irritation

Precautionary statements (GHS):

Prevention:

 $P210: Keep \ away \ from \ heat, \ hot \ surfaces, \ sparks, \ open \ flames \ and \ other \ ignition \ sources.$

No smoking.

P211: Do not spray on an open flame or other ignition source.

P251: Do not pierce or burn, even after use. [As modified by IV ATP]

P264: Wash hands thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+352: IF ON SKIN: Wash with plenty of water/... [As modified by IV ATP]

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do – continue rinsing.

P332+313: If skin irritation occurs: Get medical advice/attention.

P337+313: If eye irritation persists get medical advice/attention.

P362: Take off contaminated clothing. [As modified by IV ATP]

Storage:

P410: Protect from sunlight.

P412: Do not expose to temperatures exceeding 50°C/122°F.

Disposal:

P501: Dispose of contents/container in accordance with

local/regional/national/international regulation.

2.3 Other hazards

Inhaled: Irritating to respiratory tract and mucous membranes. Inhalation of

alcohol vapour may result in headache, nausea and vomiting. High concentrations may cause central nervous system symptoms similar to

"swallowed".

Swallowed: Unlikely under normal occupational exposures. But swallowing ethanol

may cause harmful central nervous system effects. Effects may Include excitation, euphoria, headache, Dizziness, drowsiness, blurred vision, fatigue, Tremors, convulsions, loss of consciousness, Coma, respiratory arrest and death. Severe Acute intoxication may cause hypoglycaemia,

Hypothermia, and extensor rigidity. Other Effects may include

decreased blood pressure Vomiting blood and blood changes. Aspiration

Into the lungs may cause pneumonitis.

SDS-03 Rev01 BioactiveCoilTreatmentAerosol.doc

Page 2 of 7





Chronic

Chronic intoxication of alcohol by swallowing or repeated inhalation may cause degenerative changes in the liver, kidneys, hair, and gastrointestinal tract and heart muscle.

Special Toxic Effects due to alcohol:

Persons with pre-existing liver impairment, skin and respiratory disorders may be at an increased risk from Exposure. Ethanol may also cause adverse reproductive effects. Concurrent absorption of ethanol and some drugs may cause adverse health effects. Ingestion of beverages containing ethanol by pregnant women is associated with "fetal alcohol syndrome" in their babies. The International Agency for Research of Cancer (IARC) has evaluated Alcohol drinking as "Group 1 – carcinogenic to humans".

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Mixtures

NAME	Product identifier	%	Classification according to GHS	
Benzalkonium chloride	CAS no. 139-08-2	0.1 - 3	Acute tox 4 H302 Skin Corr. 1B H314 Eye Dam. 1 H318 Aquatic Acute 1 H400,	
Ethanol	CAS no. 64-17-5	40 - 80	Flam. Liquid 2 H225: Highly flammable liquid and vapour. Eye Irrit. 2 H319: Causes serious eye irritation SCL >= 50.0)	
Butane	CAS no. 106-97-8	10 – 30	H220: Extremely flammable gas.H280: Contains gas under pressure; may explode if heated.	
Propane	CAS no. 74-98-6	10 - 30	H220: Extremely flammable gas.H280: Contains gas under pressure; may explode if heated.	
Ingredients determined not to be hazardous	NA	To 100%	-	





SECTION 4: FIRST AID

4.1 Description of first aid measures

Eye: 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.

Skin: Take off contaminated clothing. Wash skin with plenty of water. If skin irritation

occurs: Get medical advice/attention.

Inhaled: Remove to fresh air, rest patient and seek Medical attention. Give artificial

respiration if breathing stops.

Swallowed: Give plenty of water to drink. Do NOT induce vomiting. Seek medical attention

if symptom persists.

4.2 Most important symptoms and effects, both acute and delayed

Eye irritation and skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to Doctor: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Use water fog, dry chemical, carbon dioxide or foam. In the absence of water fog, a fine spray can be used.

5.2. Special hazards arising from the substance or mixture

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.

5.3. Advice for firefighters

Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

SECTION 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective gloves and eye/face protection. For further information refer to Section 8 "Exposure controls/personal protection". Eliminate all sources of ignition. Ventilate area. Evacuate unnecessary personnel.

6.2. Methods and material for containment and cleaning up

Leaking cans should be placed in a plastic bag or an open pail until the pressure has dissipated. Spray water to the spilled liquid, contain with an inert absorbent and place in a container for disposal. Clean spill area thoroughly with water. Report large spills to authorities as required.

SDS-03 Rev01 BioactiveCoilTreatmentAerosol.doc

Page 4 of 7





SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling:

DO NOT SMOKE. EXTREMELY FLAMMABLE AEROSOL. Pressurised dispenser. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not spray on a naked flame or other ignition source. Do not pierce or burn even after use.

Hygiene measures:

Take care for general good hygiene and housekeeping. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition souce.

7.3. Specific end use(s)

Use only as directed. Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 Control parameters

These are guides only and do not represent `no-effect' levels, which guarantee protection to every worker.

Worksafe Australia has established exposure standards for the following ingredients:

Standard Name	CAS No	TWA (ppm)	TWA (mg/m3)
Ethyl alcohol	64-17-5	1000	1880

8.2 Exposure controls

These measures are recommended on the basis of common application methods and may not be appropriate to all potential applications of the product. The user is responsible for carrying out a full risk assessment for their specific processes and systems of work.

Personal protective equipment:

Eye protection: Wear eye protection such as safety goggles.

Hand protection: Wear chemical resistant gloves.

Body protection: As necessary to prevent contact.

Respiratory protection: You must wear the prescribed solvent respirator. Use in a well ventilated

area. Avoid breathing vapour or spray.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

The following is the properties of the liquid without the propellant:

Appearance: A clear, pink coloured alcoholic liquid

Boiling Point: 78 - 84 °C

Specific gravity: 0.80 - 0.84 @ 20°C Solubility in water: Forms a polymer film.

Reactivity in water/air: Not reactive

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Incompatibility (materials to avoid) Strong oxidizers pH Level: 6.0-8.0

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive

10.2 Chemical stability

The mixture is stable at normal ambient temperature $(5 - 25 \, ^{\circ}\text{C})$.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Storing at temp above 25 °C.

10.5 Incompatible materials

Incompatible with oxidising agents and acids.

10.6 Hazardous decomposition products

Does not decompose when used as intended.

SECTION 11: TOXICOLOGICAL INFORMATION

Not available, the following is the toxicological information of the active ingredient in its pure form:

Benzalkonium chloride:

Acute:

Oral LD50(rat): 600 mg/kg

Dermal LD50(rabbit): 3000 mg/kg; >5mL/kg

Inhalation LC50 (rat, 1hr): 21.5 mg/L

Eye irritation (rabbit): Severe irritant/corrosive Skin irritation (rabbit): Severe irritant/corrosive

Subacute:

Dermal toxicity (rabbit – 20 days – at dilution concentration, 800 ppm active solution): Exposure animals were topically applied at either 1, 2 or 4 mL/kg, daily for a period of 20 days. At exposure doses used, the only material related effects observed were mild transitory erythema.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity study of this preparation is not available, the following is the ecological toxicity of the active ingredients; Benzalkonium chloride (pure form): very toxic to aquatic life. Ingredients contained in this preparation comply with the biodegradability criteria of Regulation (EC) No 648/2004 on detergents. None of the ingredients are classified as bioaccumulative. and This mixture does not contain any substances that are assessed as PBT or vPvB.

SECTION 13: DISPOSAL CONSIDERATIONS

Do not pierce or burn can even after use. Do not contaminate water, food or feed. Completely empty the can following the instruction for use on the label. Dispose of the package in a sanitary landfill, or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

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SECTION 14: TRANSPORT INFORMATION

Class-2.1 Aerosol, Flammable. Transport according to local/international dangerous goods

regulations.

UN No.: 1950
HazChem: 2(Y)E
Packing group: II
Subsidiary risk None

SECTION 15: REGULATORY INFORMATION

All the ingredients are listed in the AICS (Australian Inventory of Chemical Substances).

SECTION 16: OTHER INFORMATION

H220: Extremely flammable gas.

H225: Highly flammable liquid and vapour.

H280: Contains gas under pressure; may explode if heated.

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H319: Causes serious eye irritation

SCL: Specific Concentration Limit

H400: Very toxic to aquatic life

The opinions expressed herein are those of qualified experts. We believe that the information contained herein is current as of the date of this SDS. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Aeris Environmental Ltd it is the users' obligation to assure safe use of the product.

Date SDS revision: 8/8/2017

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