

## Safety Data Sheet

According to Australia NOHSC (2011) and NZ HSNO (2006) Codes of

Practice Printing date: 21.06.2019 Revised: 28.07.2022

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** PetSafe Spray Shield
- **Other product identifiers:** AT402-13625
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture:** Non-inflammatory Animal Deterrent
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**

Radio Systems Corporation 10427 PetSafe Way Knoxville, TN 37932 (800) 675-8360 (North America) +1 (865) 777-5454 (International)	Radio Systems Australia Suite 11001, Australia Fair Office Towers 36 Marine Parade Southport, QLD 4215 Australia +61 (0)7 5556 3806
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- **Emergency telephone number:**  
CHEMTEL  
1-888-533-7762 (US/Canada)  
+01 813-708-1083 (International)

Emergencies within Australia - 131126 (NSW Poison Control Centre)  
Emergencies within New Zealand - 0800 764 766 (Poison Control Centre)

### 2 Hazards identification

- **Classification (Australia, New Zealand)**  
Australia NOHSC – Hazardous Substance (Classified according to Worksafe Australia NOHSC 2011 National Code of Practice)  
Australia ADG – Dangerous Goods (Classified according to National Transport Commission Australian Dangerous Goods Code)  
New Zealand HSNO - Hazardous (Classified according to the Minimum Degrees of Hazard Regulations 2001)
- **Hazard statements (New Zealand HSNO Classification)**  
Compressed Gas - required under Land Transport Rule 45001/1: Dangerous Goods 2005.  
HSNO 6.4A Eye Irrit. 2A H319 Causes serious eye irritation.  
HSNO 6.5B Skin Sens. 1 H317 May cause an allergic skin reaction.
- **GHS label elements**  
Classifications listed also are applicable to the Australian and the New Zealand Codes of Practice for the writing of Safety Data Sheets.  
The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS04 GHS07

- **Signal word** Warning

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· **Hazard-determining components of labelling:**

Citronella Oil

· **Hazard statements**

H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

· **Precautionary statements**

The following Precautionary Statements are applicable only to New Zealand and not to Australia: P101, P102, P103.

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing mist/vapours/spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye 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.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:** Contains Citronella Oil. May produce an allergic reaction.

· **Other hazards** There are no other hazards not otherwise classified that have been identified.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterisation: Mixtures**

· **Components:**

124-38-9	carbon dioxide	Press. Gas L, H280	<5%
64-17-5	ethanol	Flam. Liq. 2, H225 Eye Irrit. 2A, H319	<10%
7732-18-5	Water		<80%
8000-29-1	Citronella Oil	Asp. Tox. 1, H304 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317 Flam. Liq. 4, H227; Acute Tox. 5, H313; Aquatic Acute 2, H401	<5%

· **Additional information:**

For the listed ingredient(s), the identity and/or exact percentages are being withheld as a trade secret.

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For the wording of the listed Hazard Statements refer to section 16.

### 4 First aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Unlikely route of exposure.

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· **Most important symptoms and effects, both acute and delayed**

Headache

Dizziness

Irritant to eyes.

Gastric or intestinal disorders when ingested.

Allergic reactions

· **Hazards:** Sensitising effect by skin contact is possible by prolonged exposure.

· **Indication of any immediate medical attention and special treatment needed**

Treat skin and mucous membrane with antihistamine and corticoid preparations.

Contains Citronella Oil. May produce an allergic reaction.

### 5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

· **For safety reasons unsuitable extinguishing agents:** None.

· **Special hazards arising from the substance or mixture**

Danger of receptacles bursting because of high vapour pressure when heated.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information:**

If aerosols are bursting, stay clear until bursting is completed. Aerosol containers can be projectiles when bursting.

Cool endangered receptacles with water spray.

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### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
- **Environmental precautions**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Use only in well ventilated areas.  
Avoid splashes or spray in enclosed areas.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:**  
Store away from foodstuffs.  
Store away from oxidising agents.
- **Further information about storage conditions:**  
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**124-38-9 carbon dioxide**

WES (Australia)

Short-term value: 54000 mg/m<sup>3</sup>, 30000 ppm  
Long-term value: 9000 \*22500 mg/m<sup>3</sup>, 5000 \*12500 ppm  
\*in coal mines

PEL (USA)

Long-term value: 9000 mg/m<sup>3</sup>, 5000 ppm

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REL (USA)	Short-term value: 54.000 mg/m <sup>3</sup> , 30.000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
TLV (USA)	Short-term value: 54.000 mg/m <sup>3</sup> , 30.000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
WES (New Zealand)	Short-term value: 54000 mg/m <sup>3</sup> , 30000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
<b>64-17-5 ethanol</b>	
WES (Australia)	Long-term value: 1880 mg/m <sup>3</sup> , 1000 ppm
PEL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm
WES (New Zealand)	Long-term value: 1880 mg/m <sup>3</sup> , 1000 ppm

- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
Not required under normal conditions of use.  
Use suitable respiratory protective device in case of insufficient ventilation.  
For spills, respiratory protection may be advisable.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

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- **Body protection:** Protective work clothing
- **Limitation and supervision of exposure into the environment:**  
No further relevant information available.

### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance**

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Aerosol         |
| · <b>Colour:</b>          | Not determined. |
| · <b>Odour:</b>           | Floral.         |
| · <b>Odour threshold:</b> | Not determined. |

- |                                       |                             |
|---------------------------------------|-----------------------------|
| · <b>pH-value:</b>                    | Neutral                     |
| · <b>Melting point/Melting range:</b> | Not applicable, as aerosol. |
| · <b>Boiling point/Boiling range:</b> | Not applicable, as aerosol. |

- |                       |                             |
|-----------------------|-----------------------------|
| · <b>Flash point:</b> | Not applicable, as aerosol. |
|-----------------------|-----------------------------|

- |   |                 |
|---|-----------------|
| · <b>Flammability (solid, gaseous):</b> | Not applicable. |
|---|-----------------|

- |  |                 |
|--|-----------------|
| · <b>Auto/Self-ignition temperature:</b> | Not determined. |
|--|-----------------|

- |                                     |                 |
|-------------------------------------|-----------------|
| · <b>Decomposition temperature:</b> | Not determined. |
|-------------------------------------|-----------------|

- |                               |                 |
|-------------------------------|-----------------|
| · <b>Danger of explosion:</b> | Not determined. |
|-------------------------------|-----------------|

· **Explosion limits**

- |                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

- |                               |                 |
|-------------------------------|-----------------|
| · <b>Oxidising properties</b> | Not determined. |
|-------------------------------|-----------------|

- |                           |                 |
|---------------------------|-----------------|
| · <b>Vapour pressure:</b> | Not determined. |
|---------------------------|-----------------|

· **Density:**

- |                            |                 |
|----------------------------|-----------------|
| · <b>Relative density:</b> | Not determined. |
| · <b>Vapour density:</b>   | Not determined. |
| · <b>Evaporation rate:</b> | Not applicable. |

· **Solubility in / Miscibility with water:**

Fully miscible.

- |   |                 |
|---|-----------------|
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined. |
|---|-----------------|

· **Viscosity**

- |                     |                 |
|---------------------|-----------------|
| · <b>Dynamic:</b>   | Not determined. |
| · <b>Kinematic:</b> | Not determined. |

- |                            |  |
|----------------------------|--|
| · <b>Other information</b> | No further relevant information available. |
|----------------------------|--|

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.

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- **Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
Danger of receptacles bursting because of high vapour pressure when heated.
- **Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products**  
  
Under fire conditions only:  
Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:** None.
- **Primary irritant effect**
- **Skin corrosion/irritation:** Slight irritant effect on skin and mucous membranes.
- **Serious eye damage/irritation:** Irritating effect.
- **Respiratory or skin sensitisation:** Sensitisation possible through skin contact.

· **IARC (International Agency for Research on Cancer):**

64-17-5	ethanol	1
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- **Probable routes of exposure:**  
Inhalation.  
Eye contact.  
Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** Causes serious eye irritation.
- **Repeated dose toxicity:** Repeated exposure may result in skin sensitivity.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Contact waste processors for recycling information.  
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- **UN-Number**
- **DOT, ADG, IMDG, IATA** UN1950
- **UN proper shipping name**  
 Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1 L (0.3 gal).
- **DOT** Aerosols
- **ADG** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** Aerosols, non-flammable

- **Transport hazard class(es)**

- **DOT**  

- **Class** 2.2
- **Label** 2.2

- **ADG**  

- **Class** 2 5A Gases.

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· <b>Label</b>	2.2
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	2.2
· <b>Label</b>	2.2
· <b>Packing group</b>	Aerosols are not assigned a packing group.
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	
· <b>EMS Number:</b>	Warning: Gases. F-D,S-U
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	
	Not applicable.

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Carcinogenic Categories**

· **IARC (International Agency for Research on Cancer)**

64-17-5 | ethanol

1

· **Australia**

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

Not a SUSMP Schedule preparation.

· **New Zealand**

· **HSNO Chemical Classification and Information Database (CCID)**

64-17-5 | ethanol

8000-29-1 | Citronella Oil

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· **New Zealand Inventory of Chemicals (NZIOC)**

All ingredients are listed.

· **Chemical safety assessment**

New Zealand

Group Standard Allocation and EPA Approval Code:

Aerosols (Subsidiary Hazard) Group Standard 2006

HSNO Approval -HSR002519

HSNO Control & Classes: 6.3A, 6.5B Trigger quantities for this substance: Trigger Quantity

Approved Handler Not Required

Location Certificate Not Required

Tracking Trigger Quantities Not applicable

Signage Trigger Quantities 3000L

Emergency Response Plan Trigger Quantities 3000L

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H227 Combustible liquid.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H313 May be harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

· **Abbreviations and acronyms:**

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Press. Gas C: Gases under pressure – Compressed gas

Press. Gas L: Gases under pressure – Liquefied gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 4: Flammable liquids – Category 4

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Acute Tox. 5: Acute toxicity – Category 5  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A  
Skin Sens. 1: Skin sensitisation – Category 1  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

### · Sources

Website, European Chemicals Agency ([echa.europa.eu](http://echa.europa.eu))  
Website, US EPA Substance Registry Services ([ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do](http://ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do))  
Website, Chemical Abstracts Registry, American Chemical Society ([www.cas.org](http://www.cas.org))  
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6  
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.  
Safety Data Sheets, Individual Manufacturers

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ChemTel Inc.  
1305 North Florida Avenue  
Tampa, Florida USA 33602-2902  
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573  
Website: [www.chemtelinc.com](http://www.chemtelinc.com)