

SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	PetSafe Citronella Spray Canister (230-005)	
Other means of identification	Not available	
Recommended use	Bark deterrent spray	
Recommended restrictions	None known.	
Manufacturer information	Radio Systems Corporation 10427 PetSafe Way Knoxville, TX 37932 US Phone 865-824-5431	
Supplier	Radio Systems Canada 160 Adelaide St , Unit 110 London N5Z 3L1 CA Phone 519-619-8593	Radio Systems Corporation 10427 PetSafe Way Knoxville, TX 37932 US Telephone 865-824-5431
CHEMTEL	US&CANADA- 1-888-533-7762 INTERNATIONAL +1-813-708-1083	

2. Hazards Identification

Physical hazards	Gases under pressure	Liquefied gas
Health hazards	Serious eye damage/eye irritation	Category 2
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		



Signal word	Warning	
Hazard statement	Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause an allergic skin reaction.	
Precautionary statement		
Prevention	Avoid breathing mist. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves and eye/face protection.	
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 ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse.	
Storage	Protect from sunlight. Store in a well ventilated place.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known	
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known	
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Oils, citronella		8000-29-1	0.5 - 1.5 *
trans-1,3,3,3-tetrafluoroprop-1-ene		29118-24-9	80 - 100 *

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.
US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

4. First Aid Measures

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Skin contact	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse.
Eye contact	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.
Ingestion	Not likely, due to the form of the product. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling of the eyes, and blurred vision.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Pressurized container may explode when exposed to heat or flame.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
Hazardous combustion products	May include and are not limited to: Fluoride gases. Oxides of carbon.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite. Following product recovery, flush area with water. Prevent entry into waterways, sewers, basements or confined areas. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Avoid breathing mists or aerosols of this product. Use only with adequate ventilation. Wear appropriate personal protective equipment.
Conditions for safe storage, including any incompatibilities	Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Store away from heat, flames, sparks, and all other sources of ignition. Do not puncture, incinerate or crush. Store in a cool, dry place out of direct sunlight. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
trans-1,3,3,3-tetrafluoroprop-1-ene (CAS 29118-24-9)	TWA	800 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses recommended but not required.

Skin protection

Hand protection Rubber gloves recommended but not required.

Other As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

Thermal hazards Not applicable.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Liquefied gas.
Physical state	Gas.
Form	Liquefied gas.
Color	Colorless
Odor	Slight ether-like
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	-2.2 °F (-19 °C)
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity	May react with incompatible materials.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat. Do not mix with other chemicals.
Incompatible materials	Alkali metals.
Hazardous decomposition products	May include and are not limited to: Fluoride gases. Oxides of carbon.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation.
Information on likely routes of exposure	
Ingestion	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Contact with liquid may cause frostbite. May cause an allergic skin reaction.
Eye contact	Contact with liquid may cause frostbite. Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling of the eyes, and blurred vision. May cause an allergic skin reaction.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Oils, citronella (CAS 8000-29-1)		
Acute		
Dermal		
LD50	Rabbit	4700 mg/kg, Univar
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	7200 mg/kg, Univar
trans-1,3,3,3-tetrafluoroprop-1-ene (CAS 29118-24-9)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Mouse	> 100000 ppm, 4 hours
	Rat	> 207000 ppm, 4 hours
Oral		
LD50	Not available	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	May cause an allergic skin reaction.	

Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
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Carcinogenicity	See below.
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US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
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Teratogenicity	Not available.
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Specific target organ toxicity - single exposure	Not classified.
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Specific target organ toxicity - repeated exposure	Not classified.
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Aspiration hazard	Not likely, due to the form of the product.
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12. Ecological Information

Ecotoxicity	Not available.
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Persistence and degradability	No data is available on the degradability of this product.
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Bioaccumulative potential	
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Mobility in soil	
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Mobility in general	No data available.
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Other adverse effects	Not available.
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No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation)

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Local disposal regulations	Dispose in accordance with all applicable regulations.
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Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
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Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
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14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification	Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.
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U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN2037
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Proper shipping name	Receptacles, small, containing gas or gas cartridges (non-flammable) without release device, not refillable and not exceeding 1 L capacity
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Technical name	trans-1,3,3,3-tetrafluoroprop-1-ene
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Hazard class	2.2
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Packaging exceptions	173.306
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Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN2037
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Proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable
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Technical name	trans-1,3,3,3-tetrafluoroprop-1-ene
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Hazard class	2.2
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Special provisions	80, 107
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IATA/ICAO (Air)

Basic shipping requirements:

UN number	UN2037
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Proper shipping name	Receptacles, small, containing gas (non-flammable) without a release device, non-refillable
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Technical name	trans-1,3,3,3-tetrafluoroprop-1-ene
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Hazard class	2.2
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Special Provisions:	A98, A167, A802
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IMDG (Marine Transport)

Basic shipping requirements:

UN number	UN2037
Proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES) without a release device, non- refillable
Technical name	trans-1,3,3,3-tetrafluoroprop-1-ene
Hazard class	2.2
Special provisions:	191, 277, 303, 344

DOT



IATA; IMDG; TDG



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Controlled

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - Yes
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations

See below

US - Texas Effects Screening Levels: Listed substance

Oils, citronella (CAS 8000-29-1) Listed.
trans-1,3,3,3-tetrafluoroprop-1-ene (CAS 29118-24-9) Listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Inventory status

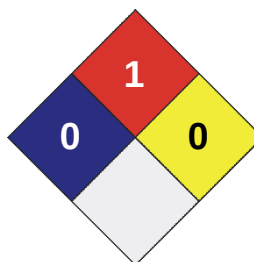
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 0
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	X

**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.