

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: DEN-CO-FUME[®] CARBON MONOXIDE FUMIGANT CARTRIDGE

Recommended Use: For the control of foxes in natal dens.

Supplier Details

Company: Animal Control Technologies (Australia) Pty Ltd
Address: 46-50 Freight Drive Somerton Vic 3062, Australia
Telephone number: 03 9308 9688
Emergency telephone number: Poisons Information Centres 13 11 26

2. HAZARDS IDENTIFICATION

Hazard classification: DANGEROUS GOODS. NON-HAZARDOUS SUBSTANCE.
Classified as dangerous goods according to the criteria of the Australian Dangerous Goods Code.
Not classified as a hazardous substance according to the criteria of NOHSC.

Risk phrase(s): None
Safety phrase(s): None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Name:	Common Name:	CAS Number:	Proportion (w/w):
Sodium nitrate		7631-99-4	53%
Carbon	Charcoal	7440-44-0	28%
Other ingredients not determined to be hazardous			19%

4. FIRST AID MEASURES

Cartridges produce toxic fumes, when burned. Carbon monoxide is the highly poisonous gas, odourless and tasteless. Fumes may be harmful if inhaled. Inhalation overexposure can cause headaches, nausea, dizziness, weakness, unconsciousness and death.

First aid: If poisoning with carbon monoxide occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26. Have this MSDS or the label with you.

Swallowed: Seek medical attention.

Eye: Flush thoroughly with copious amounts of running water. If symptoms persist, seek medical attention.

Skin: Wash skin thoroughly with soap and water.

Inhaled: If headache or drowsiness occur, transfer victim from contaminated area to fresh air and give oxygen if available. If unconscious, give artificial respiration and get to a hospital or doctor quickly.

Advice to doctor: Give oxygen by mask until the blood carboxyhaemoglobin is reduced below the dangerous level. If respiration is depressed, give artificial respiration with oxygen until respiration is normal. Seek advice from Poisons Information Centre.

5. FIRE FIGHTING MEASURES

Fire & explosion hazards:	Cartridges are designed to burn once ignited. Cartridges burn vigorously and hot but are unlikely to explode.
Suitable extinguishing media:	Extinguish by covering with water, foam, dry chemical or soil to exclude air.
Hazards from combustion:	Carbon monoxides.
Special protective equipment:	Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal:	Pick up spilled cartridge contents and replace in original container. Soak in water, crush and dispose of in approved landfill or bury below 0.5 metres of loose soil.
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7. HANDLING AND STORAGE

Precautions for safe handling:	The fuse can be ignited by a sharp blow or friction, so storage and handling should protect against contact with ignition-causing factors. Keep fire away and do not allow smoking in the presence of the fuse. Do not cut or tamper with the fuse.
Conditions for safe storage:	Store in the closed, original container in a dry, cool, well ventilated area out of direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards:	Carbon monoxide - TWA (Time Weighted Average) = 30 ppm (34 mg/m ³).
Biological limit values:	No biological limit allocated.
Engineering Controls:	Use only in a well ventilated area. Cartridges should only be ignited either once inside a fox den or once inside a fumigator combustion box. Do not handle cartridge once ignited.
Personal Protective Equipment:	Wear protective glasses or keep face well away from ignited cartridge. Wear protective gloves or keep hands well away from ignited cartridge or fuse. Respiratory protective equipment is not necessary when fumigation is carried out in open air. It is essential that adequate fresh air is available to operators using this cartridge.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cardboard tube filled with approximately 240 grams of grey-coloured, hard-compacted granular material and fitted with cardboard end caps. A fuse, 50 cm in length, is inserted in one end of the cartridge.
Odour:	Practically odourless
Vapour Pressure:	Not applicable
Vapour Density:	Not applicable
Boiling Point:	Not applicable
Solubility in Water:	Negligible
Specific Gravity:	Unknown
Flammability:	Combustible
Flashpoint:	No data
Flammable Limit:	No data

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal storage and handling conditions
Conditions to Avoid:	Heat
Incompatible materials:	Oxidising agents
Hazardous decomposition products:	Carbon monoxides
Hazardous reactions:	No specific data

11. TOXICOLOGICAL INFORMATION

Health effects:	The product is designed to produce carbon monoxide once ignited. Exposure to the product once ignited in a confined space may lead to carbon monoxide poisoning.
Acute exposure:	Contents of the uncombusted cartridge have very low acute oral toxicity (LD ₅₀ > 3,000 mg/kg body weight in rats). Two possible health hazards exist: burns and exposure to carbon monoxide gas. Carbon monoxide gas is very toxic. The absorption and resulting symptoms are dependent on the concentration of carbon monoxide in the inspired air, the time of exposure and the state of activity of the person exposed. Effects may be rapid if exposed to high concentrations of carbon monoxide. Concentrations over 1,000 ppm (1%) cause unconsciousness, respiratory failure and death. Exposure to carbon monoxide will cause conversion of haemoglobin to carboxyhaemoglobin which is less able to carry oxygen to tissues.
Chronic exposure:	Severe anoxia from sublethal carbon monoxide absorption may cause central nervous damage. Carbon monoxide does not accumulate in the body between episodes of acute exposure.

12. ECOLOGICAL INFORMATION

Ecoxicity:	No available information
Persistence and degradability:	The product is biologically degradable and will not accumulate in soil or water.
Mobility:	No available information

13. DISPOSAL CONSIDERATIONS

Soak in water, crush and dispose of in approved landfill or bury below 0.5 metres of loose soil.

14. TRANSPORT INFORMATION

This product is classified as a dangerous good according to the Australian Dangerous Goods Code 6th Edn. (1998).

UN Number:	0431
UN Proper Shipping Name:	ARTICLES, PYROTECHNIC for technical purposes
Dangerous Goods Class:	1.4G
Subsidiary Risk(s):	Not applicable
Hazchem Code:	1[Z]

15. REGULATORY INFORMATION

Poisons schedule number: None allocated

16. OTHER INFORMATION

Date of Preparation of this MSDS: 17 October 2006

This Material Safety Data Sheet (MSDS) has been developed using the following references:
National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edn. [NOHSC:2011(2003)]
Australian Dangerous Goods Code 6th Edn. (1998)
Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]
NOHSC Exposure Standards for Atmospheric Contaminants in the Occupational Environment: Guidance Note [NOHSC:3008(1995)] and National Exposure Standards [NOHSC:1003(1995)]
Large Gas Cartridge MSDS, EPA Registration Number: 56228-21 issued by the United States Department of Agriculture, Animal and Plant Health Inspection Service. Revised February 9, 2004.

The physical values and properties described in this MSDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. Animal Control Technologies provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations. The manufacturer accepts no liability for any consequence or damage arising from the transport or use of this product.

End of MSDS