



# MATERIAL SAFETY DATA SHEET

PRODUCT NAME **FREEZE SPRAY**

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name** CRC INDUSTRIES (AUST) PTY LIMITED  
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**Email** info@crcind.com.au  
**Web Site** http://www.crcind.com.au/  
**Synonym(s)** CRC FREEZE SPRAY 75 (FORMERLY) • 2039 - PRODUCT CODE • CRC FREEZE SPRAY  
**Use(s)** FREEZE SPRAY • FREEZING APPLICATIONS  
**MSDS Date** 01 January 2006

## 2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

<b>UN No.</b>	1950	<b>DG Class</b>	2.2	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Pkg Group</b>	None Allocated	<b>Hazchem Code</b>	2Y	<b>EPG</b>	2D1

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
1,1,1,2-TETRAFLUOROETHANE (HFC 134A)	C2-H2-F4	811-97-2	>60%

## 4. FIRST AID MEASURES

**Eye** If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poison Information Centre or a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. To protect rescuer, use an Air-line respirator where an inhalation risk exists. Apply artificial respiration if not breathing.

**Skin** Cold burns: Remove contaminated clothing and gently flush affected areas with warm water (30°C) for 15 minutes. Apply sterile dressing and treat as for a thermal burn. For large burns, immerse in warm water for 15 minutes. DO NOT apply any form of direct heat. Seek immediate medical attention.

**Ingestion** For advice, contact a Poisons Information Centre or a doctor (at once). If swallowed, do not induce vomiting.

**Advice to Doctor** Treat symptomatically

## 5. FIRE FIGHTING MEASURES

**Flammability** Non flammable liquid. May evolve toxic gases (carbon oxides, hydrogen fluoride, fluorides, hydrocarbons) when heated to decomposition. Will evolve highly corrosive - toxic hydrogen fluoride gas at very high temperatures.

**Fire and Explosion** Non flammable. Evacuate area and contact emergency services. Toxic gases (hydrogen fluoride, fluorides, carbon oxides, hydrocarbons) may be evolved when heated. Remain upwind and notify those downwind of hazard. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby areas.

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**Extinguishing** Non flammable.

**Hazchem Code** 2Y

### 6. ACCIDENTAL RELEASE MEASURES

**Spillage** If cans are punctured (bulk), clear area of all unprotected personnel and ventilate area. Wear splash-proof goggles, leather gloves, coveralls and boots. Where an inhalation risk exists, wear an Air-line respirator. Collect and allow to discharge outdoors. Absorb residues with sand or similar and place in clean containers for disposal.

### 7. STORAGE AND HANDLING

**Storage** Store in cool, dry, well ventilated area, removed from oxidising agents, alkalis, active metals, metal powders (eg. aluminium, barium, lithium), heat and foodstuffs. Aerosol containers may explode if exposed to excessive heat (> 50°C). Ensure containers are adequately labelled and protected from physical damage.

**Handling** Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Stds	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	1,1,1,2-Tetrafluoroethane	NOHSC (AUS)	1000.0	4240.0	--	--

**Biological Limits** No biological limit allocated.

**Engineering Controls** Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**PPE** Wear splash-proof goggles, leather gloves and safety glasses. When using large quantities or where heavy contamination is likely, wear coveralls. Where an inhalation risk exists, wear a Type A-Class P1 (Organic gases/vapours and Particulate) Respirator. At high vapour levels, wear an Air-line respirator.



### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	COLOURLESS GAS (AEROSOL DISPENSED)	<b>Solubility (water)</b>	NOT AVAILABLE
<b>Odour</b>	ETHEREAL-LIKE ODOUR	<b>Specific Gravity</b>	1.212
<b>pH</b>	NOT AVAILABLE	<b>% Volatiles</b>	100 %
<b>Vapour Pressure</b>	0.583 MPa @ 25°C	<b>Flammability</b>	NON FLAMMABLE
<b>Vapour Density</b>	> 1 (Air = 1)	<b>Flash Point</b>	NOT RELEVANT
<b>Boiling Point</b>	-26.4°C	<b>Upper Explosion Limit</b>	NOT RELEVANT
<b>Melting Point</b>	NOT AVAILABLE	<b>Lower Explosion Limit</b>	NOT RELEVANT
<b>Evaporation Rate</b>	NOT AVAILABLE	<b>Autoignition Temperature</b>	NOT AVAILABLE

### 10. STABILITY AND REACTIVITY

**Material to Avoid** Incompatible with oxidising agents (eg. hypochlorite), alkalis/ alkali earth metals and finely divided metal powders (eg. aluminium, barium, lithium).

**Decomposition** May evolve toxic gases (carbon oxides, hydrogen fluoride, fluorides, hydrocarbons) when heated to decomposition.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Health Hazard Summary</b>	Asphyxiant - narcotic. This product may only present a hazard with direct eye contact, prolonged and repeated skin contact or with vapour/gas inhalation at high levels. May cause frost-bite or cold burns with direct contact. Individuals with impaired cardiovascular function, especially those with a history of cardiac arrhythmias, are advised to preclude themselves from exposure.
<b>Eye</b>	Non irritant. However, direct contact with evaporating liquid may result in severe cold burns with possible permanent damage.
<b>Inhalation</b>	Irritant - narcotic - asphyxiant. Over exposure may result in upper respiratory tract irritation, nausea and headache. At high levels; dizziness, breathing difficulties and at very high levels, anaesthesia, cardiac arrhythmias, pulmonary oedema and unconsciousness.
<b>Skin</b>	Low irritant. Prolonged or repeated contact may result in mild irritation. Contact with liquid may result in frost-bite with severe tissue damage.
<b>Ingestion</b>	Ingestion is considered unlikely due to product form.
<b>Toxicity Data</b>	1,1,1,2-TETRAFLUOROETHANE (HFC 134A) (811-97-2) LC50 (Inhalation): 1500 g/m <sup>3</sup> /4 hour (rat)

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## 12. ECOLOGICAL INFORMATION

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<b>Environment</b>	Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.
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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Disposal</b>	For small amounts absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer for additional information.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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## 14. TRANSPORT INFORMATION

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### CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

<b>Shipping Name</b>	AEROSOLS				
<b>UN No.</b>	1950	<b>DG Class</b>	2.2	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Pkg Group</b>	None Allocated	<b>Hazchem Code</b>	2Y	<b>EPG</b>	2D1

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## 15. REGULATORY INFORMATION

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<b>Poison Schedule</b>	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
<b>AICS</b>	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

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## 16. OTHER INFORMATION

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**Additional Information** ASPHYXIANTS (1): When present in the atmospheres in high concentrations, asphyxiants reduce the oxygen concentration by displacement. Atmospheres deficient in oxygen do not provide adequate sensory warning of danger and most simple asphyxiants are odourless. Therefore it is not appropriate to recommend an exposure standard for each asphyxiant, but to maintain oxygen concentrations. However, some asphyxiants may be given an exposure standard due to the potential for narcotic effects at high concentrations or an explosion hazard.

ASPHYXIANTS (2): There is a significant hazard associated with workers entering poorly ventilated areas (eg. tanks) where oxygen may be deficient. An air supplied breathing apparatus may be required if adequate ventilation is not ensured. Refer to AS/NZS 2865 - Safe Working in a Confined Space.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

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**ABBREVIATIONS:**

ADB - Air-Dry Basis.  
BEI - Biological Exposure Indice(s)  
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.  
CNS - Central Nervous System.  
EINECS - European INventory of Existing Commercial chemical Substances.  
IARC - International Agency for Research on Cancer.  
M - moles per litre, a unit of concentration.  
mg/m3 - Milligrams per cubic metre.  
NOS - Not Otherwise Specified.  
NTP - National Toxicology Program.  
OSHA - Occupational Safety and Health Administration.  
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).  
ppm - Parts Per Million.  
RTECS - Registry of Toxic Effects of Chemical Substances.  
TWA/ES - Time Weighted Average or Exposure Standard.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**Report Status**

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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**End of Report**