

SAFETY DATA SHEET

Carbon Dioxide

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER			
Product Name	Carbon Dioxide	Other Names	CO2
Recommended Use	Fire protection agent for total flooding of rooms containing electrical equipment such as computer rooms as well as flammable liquid storage and Class A risks such as records rooms and libraries.		
Supplier Name	Wormald	Address	Unit 1, 2-8 South Street Rydalmere, NSW 2116 AUSTRALIA
Telephone No.	133 166	Emergency Telephone No.	133 166 or 000
		Date Prepared	February 2013

SECTION 2: HAZARDS IDENTIFICATION			
Hazard Classification	Dangerous Goods. Non Hazardous Substance		
DG Class	2.2	Hazchem Code	2TE

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS		
SUBSTANCE		
Chemical Identity of the Pure Substance	Common Name / Synonyms	CAS Number
CO ₂	Carbon Dioxide	124-38-9

SECTION 4: FIRST AID MEASURES		
Description of Necessary First Aid Measures	EYE CONTACT	Treatment for cold burns. Immediately flush eyes with plenty of water for 15 minutes whilst holding lids open. If redness, itching or burning occurs get medical attention.
	SKIN CONTACT	Treatment for cold burns. Wash material off skin with copious amounts of water for at least 15 minutes. If redness, itching or burning occurs get medical attention.
	INHALATION	Call doctor. If victim is conscious, move to uncontaminated area to breath fresh air. Keep warm and quiet. If victim is unconscious, move to uncontaminated area and give assisted respiration. Continued treatment should be symptomatic and supportive.
	INGESTION	Not considered a potential route of exposure. Due to product form and application, ingestion is considered unlikely.
Medical Attention and Special Treatment	Treat for asphyxia and cold burns	

SECTION 5: FIRE FIGHTING MEASURES			
Suitable Extinguishing Media	This product is non flammable. Use fire-extinguishing media appropriate for surrounding materials.	Hazards From Combustion Products	Not available – gas is non flammable
Special Protective Precautions and Equipment for Fire Fighters	Rescuers should not enter an oxygen deficient atmosphere without using self-contained full face positive pressure breathing equipment. Keep containers cool with water spray. Containers may rupture when heated, fire exposed containers may vent contents through pressure relief device.	Hazchem Code	2TE

SECTION 6: ACCIDENTAL RELEASE MEASURES	
Emergency Procedures	Avoid direct skin and eye contact with escaping high pressure gas. Evacuate the area and ventilate. Do not enter areas where high concentrations may exist without appropriate protective equipment including a self-contained breathing apparatus.
Methods and Materials for Containment and Clean Up	Ensure that the area is well ventilated, this substance will dissipate into the atmosphere.

SECTION 7: HANDLING AND STORAGE	
Precautions for Safe Handling	Protect cylinders from physical damage, do not drag, roll, slide or drop. When moving cylinders use cylinder trolley, cage etc specifically designed to transport cylinders. Do not move cylinders without safety cap in place to prevent damage to valve.
Conditions for Safe Storage, Including any Incompatibilities	Do not store near incompatible materials. Keep cylinders away from combustible materials and sources of heat and ignition Keep cylinders below 50°C in a well ventilated place free from conditions likely to encourage corrosion. Cylinders shall be suitably restrained to prevent falling or toppling.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION					
National Exposure Standards	Substance	ES-TWA		ES-STEL	
		ppm	mg/m ³	ppm	mg/m ³
	Carbon dioxide	5000	9000	30000	54000
Engineering Controls	Gas cylinders are equipped with pressure and temperature relief devices.	Biological Limit Controls		Not available	
Personal Protection Equipment	Chemical goggles, gloves, full cover overalls and safety footwear. Where an inhalation risk exists, wear breathing apparatus.				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Appearance	Colourless gas	Odour	Slightly pungent at high concentrations.
pH	Not available	Vapour Pressure	5090 kPa @ 15°C
Vapour Density (air = 1)	1.873 kg/m ³	Boiling Point / Range	-78.5°C
Freezing / Melting Point (specify)	-56.6°C	Solubility in Water	1.716 v/v
Specific Gravity or Density	1.53	Flash Point	Non flammable
Upper and Lower Flammable (explosive) Limits in Air	Non flammable	Ignition Temperature	Non flammable

SECTION 10: STABILITY AND REACTIVITY			
Chemical Stability	Stable under normal conditions of handling and use.	Conditions to Avoid	None
Incompatible Materials	(Al + Na2O2) (Mg + Na2O), Cs2O, Li, K, Mg(C2H5)2, KC2H, Na, NaK, and Ti.	Hazardous Decomposition Products	May evolve toxic gases if heated to decomposition.
Hazardous Reactions	Polymerization will not occur		

SECTION 11: TOXICOLOGICAL INFORMATION		
Health Effects From the Likely Routes of Exposure	EYE CONTACT	The liquid form of this material can produce chilling sensations and discomfort and also frostbite.
	SKIN CONTACT	Evaporation of liquid from skin can produce chilling sensations. Frostbite can occur. Avoid carbon dioxide snow (dry ice).
	INHALATION	Carbon dioxide is an asphyxiant. Effects of oxygen deficiency (below 6 %) are as follows: convulsive movements, possible respiratory collapse and death.
	INGESTION	Not a likely route of entry.
Acute Overexposure	Contact can produce chilling sensations, light headedness, giddiness, shortness of breath, muscular tremors and weakness, and acrocyanosis. Also unconsciousness or even death.	
Chronic Overexposure	Prolonged exposure to an oxygen deficient atmosphere (below 18 % oxygen) may affect the heart and nervous system.	

SECTION 12: ECOLOGICAL INFORMATION	
Ecotoxicity	Not available
Mobility	Not available
Persistence and Degradability	Not available
Bioaccumulative Potential	Not available
Environmental Fate (Exposure)	Not available

SECTION 13: DISPOSAL CONSIDERATIONS	
Disposal Methods and Containers	Cylinders should be returned to supplier for disposal of contents.
Special Precautions for Landfill or Incineration	Not available.

SECTION 14: TRANSPORT INFORMATION			
UN Number	UN 1013	UN Proper Shipping Name	Carbon Dioxide
Class and Subsidiary Risk	D. G. Class 2.2	Packing Group	Packing Group III
Special Precautions for User	None	Hazchem Code	2TE

SECTION 15: REGULATORY INFORMATION	
The regulatory status of a material (including its ingredients) under relevant Australian health, safety and environmental legislation.	Carbon dioxide is an approved gas which is listed in Australian Standard AS 6183.

SECTION 16: OTHER INFORMATION		
Date of Preparation	February 2013	
Abbreviations	CAS – Chemical Abstract Number	STEL – Short Term Exposure Limit
	TWA – Time Weighted Average	

END OF SDS

Contact Us

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