# MATERIAL SAFETY DATA SHEET

# SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CARBON DIOXIDE, GAS

GENERAL USE: Aerosol propellant

PRODUCT DESCRIPTION: Odorless, colorless, non-flammable gas.



MANUFACTURER'S NAME Innovations in Cycling ADDRESS (NUMBER, STREET, P.O. BOX) 2700 E. Bilby Rd., Bldg. C MATERIAL SAFETY DATA SHEET Tucson, AZ 85706 DISTRIBUTOR'S NAME Same ADDRESS (NUMBER, STREET, P.O. BOX)	COUNTRY USA	DATE PREP SUPERSED TELEPHON (520) 295- EMERGENO CHEM • TI	ES: E NUMBE 3936 CY TELEP	HONE NU	02 FORMAT IMBER	ION	Page 1	of 4
ADDRESS (NUMBER, STREET, P.O. BOX) 2700 E. Bilby Rd., Bidg. C MATERIAL SAFETY DATA SHEET Tucson, AZ 85706 DISTRIBUTOR'S NAME Same		TELEPHON (520) 295- EMERGENO	E NUMBE 3936 CY TELEP	R FOR IN	FORMAT	ION	l Laña	
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Tucson, AZ 85706 DISTRIBUTOR'S NAME Same								
DISTRIBUTOR'S NAME Same	U3A	CI SEIM - LI			**************************************	HEA /D	123 240 N	coc
Same			(000)	200-0824	CONSIDE	DOM (O	13) 246-0	200
		TELEPHON	E NUMBE	RFORIN	FORMAT	ION		•
(CITY, STATE AND ZIP CODE)	COUNTRY	EMERGENCY TELEPHONE NUMBER						
SECTIO!	V 2-HAZARD	OUS INGI	REDIEL	17 <b>5</b>				
HAZARDOUS COMPONENTS	CAS#	% (by weight)	OSH/		ACGIH		SARA TITLE III	R(
Picales and Africa dala	401.00.5		PPM :	MG/M3	PPM	MG/M3		
Carbon dioxide	124-38-9	100	5000	9000	30000	54000	aasii waxii waxaa aa qaaqaa aa waxaa	
								रिकार
	N 3-HAZARC	IS IDENTI	FICATI	ON				
EMERGENCY OVERVIEW								
Odorless, colorless nonflammable gas. Simple asp confined area. Maintain oxygen levels above 19.5 pressure. Use and store below 125° F. Hazard Sy	<ol><li>Carbon dioxide e</li></ol>	exposure can ca	iuse naus	ea and res	plratory p	roblems.	Contents	s un (
POTENTIAL HEALTH EFFECTS								
NHALATION: Gas may cause narcosis with head possibly death. Very high concentrations (>10,000	ppm) may cause as	phyxiation with	rapid resi	piration, re	owsiness, duced me	unconsc intal alert	iousness a ness and i	ind oss
muscle coordination, nausea, vomiting, prostration						1		
SKIN: Not likely to cause a problem due to high vo pressure may cause frostbite.	namery or product. Co	ontact with liqui	ia or rapid	ıy expandi	ng gases	reicased	under higi	П
	ritation					······································		***************************************
EYES: Direct contact with gas may cause minor in	:: Light REALP( F p							
EYES: Direct contact with gas may cause minor in INGESTION: Not likely to cause a problem due to		luci	······································	····	·······		······································	·····

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### SECTION 4-FIRST AID MEASURES

INHALATION: Remove affected person to fresh air; provide oxygen if breathing is difficult; if affected person is not breathing, administer CPR and seek emergency medical attention.

SKIN: Wash affected area with soap and water; if irritation persists, seek medical attention.

EYES: Check for and remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

INGESTION: Not expected under normal conditions due to gaseous state.

# SECTION 5-FIRE FIGHTING MEASURES

FLASH POINT (METHOD USED)

FLAMMABLE LIMITS

LEL: Not applicable

UEL: Not applicable

Non - flammable

AUTOIGNITION TEMPERATURE:

Not determined

NFPA CLASS: Norw

GENERAL HAZARDS: Product is not flammable or combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.

#### **EXTINGUISHING MEDIA**

Carbon dioxide, water, water fog, dry chemical, chemical foam.

#### FIRE FIGHTING PROCEDURES

Self - contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.

#### UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers can explode due to buildup of pressure when exposed to extreme heat. Contents under pressure. Do not use or store near heat sources.

#### HAZARDOUS COMBUSTION PRODUCTS

Smoke, fumes or vapors, exides of carbon.

# SECTION 6-ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Evacuate and ventilate area. Allow gas to escape to air. Remaining fiquid may be absorbed on to an approved absorbent and placed in an approved container for disposal.

## SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep container closed when not in use; protect containers from abuse; protect from extreme temperatures, keep away from sources of heat. Do not puncture container. Do not attempt to refill container. Maintain well ventilated work areas to minimize exposure when handling this material.

### SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **ENGINEERING CONTROLS**

The use of local exhaust ventilation is required to control emissions near the source. Provide mechanical ventilation of confined spaces.

# PERSONAL PROTECTION:

RESPIRATORY PROTECTION: None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

PROTECTIVE GLOVES: Utilize appropriate gloves for protection needed from cold, based on exposure.

EYE PROTECTION: Chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN166,

OTHER PROTECTIVE CLOTHING OR EQUIPMENT; Safety eyewash station nearby.

WORK / HYGIENIC PRACTICES: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

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SECTION 9 - PHY	SICAL AND	CHEMIC	AL PROPERTIES				
VAPOR PRESSURE VAPOR DENSITY (AIR = 1)							
8.56 psia @ 20° C	1.53						
SPECIFIC GRAVITY (WATER = 1)		EVAPORATION RATE (CCL4 = 1)					
Not available		<1					
SOLUBILITY IN WATER		FREEZING POINT					
Very soluble pH		-69.8° F (-56.6° C)					
Not applicable		APPEARANCE AND ODOR					
BOILING POINT	Colorless, odorless gas PHYSICAL STATE						
-109.3° F ( -78.5° C)	Gas						
VISCOSITY				VOLATILE ORGANIC COMPOUNDS (Total VOC's)			
Gas		None					
SECTION 10	1-STABILI	TY AND A	EACTIVITY				
STABILITY UNSTABLE:	<u> </u>	CONDITIONS TO AVOID: Extreme temperatures.					
STABLE:	XXX		,				
INCOMPATIBILITY (MATERIALS TO AVOID): Strong	oxidizers, stron	g acids.					
HAZARDOUS DECOMPOSITION OR BYPRODUCTS	Decomposition	a will not occur	if handled and stored properly	In case of a fire assistan			
of carbon, hydrocarbons, furnes or vapors, and smoke	may be produce	id.	II relicied and soled properly	. III Coso Ora III <del>o</del> , Uxiues			
HAZARDOUS POLYMERIZATION MAY OCCUR							
WILL NOT OCCUR:	XXX						
SECTION 11 -	TOXICOLO	OGICAL IA	FORMATION				
	T	<del>                                     </del>	LD50 of Ingredient	LC50 of ingredient			
Hazardous Ingredients	CAS#	EINECS#	(Specify Species and Route)	(Specify Species)			
Carbon dioxide	124-38-9	204-696-9	Information not found	Information not found			
	The second secon						
	West and the second sec			and the state of t			
				***			
SECTION 12	- ECOLOG	ICAL INFI	ORMATION				
No data are available on the adverse effects of this mai				ollable Deand on the			
chemical composition of this product it is assumed that in limited quantities. However, such treatment should be in this mixture are classified as a Marine Pollutant.	the mixture can	be treated in a	n acclimatized biological wasti	e treatment plant system			
SECTION 13	- DISPOSA	L CONSII	DERATIONS				
WASTE DISPOSAL METHOD: Dispose of in accordance hazardous vapors in a disposal container creating a dar for complete waste disposal regulations. Consult your I chemicals. Do not flush to sanitary sewer or waterway.	ce with Local, St ngerous environ local, state, or F	ate, and Feder ment. Refer to	al Regulations. This product n "40 CFR Protection of Environ	nment Parts 260 - 299"			

# SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Carbon dioxide

DOT HAZARD CLASS / Pack Group: 2.2

REFERENCE: 49 CFR 173.302, .306, .314

UN / NA IDENTIFICATION NUMBER: UN 1013

LABEL: NONFLAMMABLE GAS

HAZARD SYMBOLS: None

IATA HAZARD CLASS / Pack Group: 2.2

IMDG HAZARD CLASS: 2.2

RID/ADR Dangerous Goods Code: 2.2 A

UN TDG Class / Pack Group: 2.2

Hazard Identification Number (HIN): 20

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information menuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping,

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# SECTION 15 - REGULATORY INFORMATION

#### TSCA (Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from fisting because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

# SARA TITLE III (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories

immediate health, sudden release of pressure

#### 313 Reportable Ingredients:

None

# CERCLA (Comprehensive Response Compensation and Liability Act)

# California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

### CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations, WHMIS Classification; A

#### IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

# DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only Ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

# EINECS (European inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

EC Risk Phrases R20 Hamful by Inhalation.	SYMBOL(S) REQUIRED FOR LABEL None	EC Safety Phrases S38 In case of insufficient ventilation, wear suitable respiratory equipment.
·		

# SECTION 16 - OTHER INFORMATION

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS HAZARD RATINGS

HEALTH

\* = Chronic Health Hazard

2 = MODERATE

**FLAMMABILITY** 

a 0 = INSIGNIFICANT 3 = HIGH

PHYSICAL HAZARD

1 = SLIGHT ű

1

4 = EXTREME

PERSONAL PROTECTIVE EQUIPMENT

Safety Glasses, Gloves

### REVISION SUMMARY:

This MSDS has been revised in the following sections:

Format update

MSDS Prepared by: Chem-Tel, Inc.

1305 N. Florida Ave. Tampa, Florida USA 33602

(800) 255-3924 Outside USA (813) 248-0573

The information cantained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the The internation cantained herein is conjugate to be accurate our is not warranted to be set. Data and calculated for menufacturers of the components of the product. Users are advised to confirm in solvence of need that internation is current, applicable and solvent to the circumstances of use. Vendor assumes no responsibility for injury to vendoe or third persons productly coused by the material if responsible safety procedures are not adhered to as sliputed in the date sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal uses of this meterial system if responsible safety procedures are not adhered to as sliputed. Any questions regarding this product about the directed to the manufacturer of the product as described in Section 1.