

PRODUCT NAME: CARBON DIOXIDE (1 PPM – 35%) IN NITROGEN

MSDS NO: 34		Version:3	Date: March, 2012		
1.	Chemical Product and Company Identification				
	Gasco Affiliates, LL 320 Scarlett Blvd. Oldsmar, FL 34677	с			
	TELEPHONE NUME FAX NUMBER: (866 E-MAIL: info@gasc) 755-8920	24-HOUR EMERGENCY NUMBER: 1-800-424-9300		
PRODUCT NAME: CARBON DIOXIDE (1 PPM – 35% CHEMICAL NAME: Carbon Dioxide in nitrogen COMMON NAMES/ SYNONYMS: None TDG (Canada) CLASSIFICATION: 2.2 WHIMIS CLASSIFICATION: A		Carbon Dioxide in nitroge SYNONYMS: None SSIFICATION: 2.2			

2. **COMPOSITION/ INFORMATION ON INGREDIENTS**

INGREDIENT	%VOLUME	PEL-OSHA	TLV-ACGIH	LD ₅₀ or LC ₅₀ Route/Species
Carbon Dioxide FORMULA: CO ₂	0.0001-35	5000 ppm TWA	5000 ppm TWA 30,000 ppm STEL	
Nitrogen FORMULA: N ₂	65.0 to 99.9999	Simple asphyxiate	Simple Asphyxiate	N/A

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW Carbon dioxide exposure can cause nausea and respiratory problems. High concentrations may cause vasodilatation leading to circulatory collapse.

ROUTE OF ENTRY:

Skin Contact	Skin Absorption	Eye Contact	Inhalation	Ingestion
No	No	No	Yes	No
HEALTH EFFECTS:				
Exposure Limits	Irritant	Sensitization	Reproductive Hazard	Mutagen
Yes	No	No	No	No

Carcinogenicity: --NTP: No IARC: No OSHA: No

EYE EFFECTS:

N/A



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SKIN EFFECTS:

N/A

INGESTION EFFECTS:

Ingestion unlikely. Gas at room temperature.

INHALATION EFFECTS:

Carbon dioxide is the most powerful cerebral vasodilator known. Inhaling large concentrations causes rapid circulatory insufficiency leading to coma and death. Asphyxiation is likely to occur before the effects of carbon dioxide overexposure. Chronic, harmful effects are not known form repeated inhalation of low concentrations. Low concentrations of carbon dioxide cause increased respiration and headache.

Effects of oxygen deficiency resulting form simple asphyxiation may include: rapid breathing, diminished mental alertness, impaired muscular coordination, faulty judgement, depression of all sensations, emotional instability, and fatigue. As asphyxiation progresses, nausea, vomiting, prostration, and loss of consciousness may result, eventually leading to convulsions, coma, and death.

NFPA HAZARD C	CODES	HMIS HAZARD CODES		RATING SYSTEM
Health: Flammability: Reactivity:	1 0 0	Health: Flammability: Reactivity:	1 0 0	0= No Hazard 1= Slight Hazard 2= Moderate Hazard 3= Serious Hazard 4= Severe Hazard

4. FIRST AID MEASURES

EYES: N/A

SKIN: N/A

INGESTION:

Not required

INHALATION:

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASED OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED THE SELF-CONTAINED BREATHING APPARATUS. Victims should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. If breathing has stopped administer artificial resuscitation and supplemental oxygen. Further treatment should be symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

These containers hold gas under pressure, with no liquid phase. If involved in a major fire, they should be sprayed with water to avoid pressure increases, otherwise pressures will rise and ultimately they may distort or burst to release the contents. The gases will not add significantly to the fire, but containers or fragments may be projected considerable distances - thereby hampering fire fighting efforts.

6. ACCIDENTAL RELEASE MEASURES

In terms of weight, these containers hold very little contents, such that any accidental release by puncturing etc. will be of no practical concern.



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7. HANDLING AND STORAGE

Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Use only in well-ventilated areas. Do not heat cylinder by any means to increase rate of product from the cylinder. Do not allow the temperature where cylinders are stored to exceed 130°F (54°C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Use adequate ventilation for extended use of gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER:	VALUE:
Physical state	: Gas
Evaporation point	: N/A
pH	: N/A
Odor and appearance	: Colorless, odorless gas

10. STABILITY AND REACTIVITY

Stable under normal conditions. Expected shelf life 48 months.

11. TOXICOLOGICAL INFORMATION

Carbon dioxide is the most powerful cerebral vasodilator known. Inhaling large concentrations causes rapid circulatory insufficiency leading to coma and death. Chronic, harmful effects are not known form repeated inhalation of low (3 to 5 molar %) concentrations.

12. ECOLOGICAL INFORMATION

No ecological damage caused by this product.

13. DISPOSAL INFORMATION

Do not discharge into any place where its accumulation could be dangerous. Used containers are acceptable for disposal in the normal waste stream as long as the cylinder is empty and valve removed or cylinder wall is punctured; but GASCO encourages the consumer to return cylinders.

14. TRANSPORT INFORMATION

	United States DOT
PROPER SHIPPING NAME:	Compressed Gas N.O.S.
	(Carbon Dioxide in Nitrogen)
HAZARD CLASS:	2.2
IDENTIFICATION NUMBER:	UN1956
SHIPPING LABEL:	NONFLAMMABLE GAS

Canada TDG Compressed Gas N.O.S. (Carbon Dioxide in Nitrogen) 2.2 UN1956 NONFLAMMABLE GAS



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15. **REGULATORY INFORMATION**

Classified non-flammable/non-toxic according to Directives 88/379/EEC, 67/548/EEC and the UK's CHIP 96 Regulations.

16. OTHER INFORMATION

This MSDS has been prepared in accordance with the Chemicals (Hazard Information and Packaging for Supply (Amendment) Regulation 1996. The information is based on the best knowledge of GASCO, and its advisors and is given in good faith, but we cannot guarantee its accuracy, reliability or completeness and therefore disclaim any liability for loss or damage arising out of use of this data. Since conditions of use are outside the control of the Company and its advisors we disclaim any liability for loss or damage when the product is used for other purposes than it is intended.

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