

# GARDEN GROVE



## FIRE DEPARTMENT

### HAZARDOUS MATERIALS DISCLOSURE PROGRAM

#### REPORTING FORMS PACKET

**SHORT VERSION**

FOR OFFICIAL USE ONLY	
FACILITY ID NO.	<u>438</u>
BUSINESS NAME	<u>g+m Truck Bodies</u>
BUSINESS ADDRESS	<u>7541 Chapman Ave #B</u>
APPROVED BY	<u>G</u> DATE <u>7/2011</u>
NEW BUSINESS	<input type="checkbox"/> YES <input type="checkbox"/> NO UPDATE _____
PICK	<input type="checkbox"/> 4D <input type="checkbox"/> BUSLIST <input type="checkbox"/> CALARP: <input type="checkbox"/> CUPA: <input type="checkbox"/> GIS <input type="checkbox"/>
FEE	_____



# CITY OF GARDEN GROVE FIRE DEPARTMENT

11301 Acacia Parkway, Garden Grove, CA 92842 (714) 741-5600 (714) 741-5636

## Hazardous Materials Business Information Form

### BUSINESS INFORMATION

FACILITY # (Supplied by GGFD)	3 0 0 3 5	BEGINNING DATE	4-85-1hc on 3-00	1	ENDING DATE	current	2			
BUSINESS NAME	Plumbing Vans by Chauvins, Inc. DBA J: M Truck				4	BUSINESS PHONE	714 898-4259	5		
BUSINESS SITE ADDRESS	7341 Chapman Ave #B							6		
CITY	GARDEN GROVE			7	STATE	CA	8	ZIP	92841	9
DUN & BRADSTREET	7	10	SIC CODE (4 DIGIT #)	3444	11	FIRE DISTRICT	2215	12		
COUNTY	ORANGE							13		
BUSINESS OPERATOR NAME	[REDACTED]				14	OPERATOR'S PHONE	[REDACTED]	15		

### BUSINESS OWNER

[REDACTED]

### ENVIRONMENTAL CONTACT

CONTACT NAME	same	22	CONTACT PHONE	23	
CONTACT MAILING ADDRESS	[REDACTED]				24
CITY	25	STATE	26	ZIP	27

### PRIMARY

### EMERGENCY CONTACTS

### SECONDARY

[REDACTED]

### ADDITIONAL LOCALLY COLLECTED INFORMATION

DESCRIBE THE TYPE OF BUSINESS OPERATION:	sheet metal fabrication	38	TOTAL # OF EMPLOYEES	0	39			
BILLING ADDRESS (IF DIFFERENT FROM ABOVE)	same	40	ATTENTION	[REDACTED]	41			
PROPERTY OWNER NAME	Sharrom Gambill	42	ADDRESS	PO Box 2288 Sun City CA 92584	43	PHONE	[REDACTED]	44
<b>Certification:</b> Based on my inquiry of those individuals responsible for obtaining the information, I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the information is true, accurate, and complete.								
SIGNATURE	[REDACTED]	45	DATE	11-12-04	46			
NAME OF SIGNER (print)	[REDACTED]	47	NAME OF DOCUMENT PREPARER (print)	same	49			
TITLE OF SIGNER	See Treas.	48	TITLE OF DOCUMENT PREPARER	[REDACTED]	50			



CITY OF GARDEN GROVE  
 11301 ACACIA PARKWAY  
 GARDEN GROVE, CALIFORNIA 92842  
 (714) 741-5636

# CUPA

FACILITY INFORMATION

## BUSINESS ACTIVITIES

Page 1 of \_\_\_\_

### I. FACILITY IDENTIFICATION

FACILITY ID#	3	0	0	3	5													1. EPA ID # (Hazardous Waste Only)	2.
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BUSINESS NAME (Same as FACILITY NAME or DBA-Doing Business As) 3.  
*Jim Truck Bodies dba of Plumbing Vans by Chauvins Inc.*

### II. ACTIVITIES DECLARATION

NOTE: If you check YES to any part of this list, please submit the Business Owner/Operator Identification page.

Does your facility...	If Yes, please complete these pages of the UPCF...	
<b>A. HAZARDOUS MATERIALS</b> Have on site (for any purpose) hazardous materials at or above 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or handle radiological materials in quantities for which an emergency plan is required pursuant to 10 CFR Parts 30, 40 or 70?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	4. <input checked="" type="checkbox"/> HAZARDOUS MATERIALS INVENTORY - CHEMICAL DESCRIPTION (Form 3)
<b>B. UNDERGROUND STORAGE TANKS (USTs)</b>		
1. Own or operate underground storage tanks?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	5. <input checked="" type="checkbox"/> UST FACILITY (Formerly SWRCB Form A)
2. Intent to upgrade existing or install new USTs?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	6. <input checked="" type="checkbox"/> UST TANK (one page per tank) (Formerly Form B)
3. Need to report closing a UST?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	7. <input checked="" type="checkbox"/> UST FACILITY <input checked="" type="checkbox"/> UST TANK (one per tank) <input checked="" type="checkbox"/> UST INSTALLATION - CERTIFICATE OF COMPLIANCE (one page per tank) (Formerly Form C) <input checked="" type="checkbox"/> UST TANK (closure portion-one page per tank)
<b>C. ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)</b> Own or operate ASTs above these thresholds: - any tank capacity is greater than 660 gallons, or - the total aggregate capacity for the entire facility (ASTs, drums and portable containers) greater than 1,320 gallons?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	8. <input checked="" type="checkbox"/> NO FORM REQUIRED TO CUPAS
<b>D. HAZARDOUS WASTE</b>		
1. Generate hazardous waste?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	9. <input checked="" type="checkbox"/> EPA ID NUMBER - provide at the top of this page
2. Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC §25143.2)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	10. <input checked="" type="checkbox"/> RECYCLABLE MATERIALS REPORT (one per recycler)
3. Treat hazardous waste on site?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	11. <input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - FACILITY (Formerly DTSC Forms 1772) <input checked="" type="checkbox"/> ONSITE HAZARDOUS WASTE TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772A,B,C,D and L)
4. Treatment subject to financial assurance requirements (for Permit by Rule and Condition Authorization)?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	12. <input checked="" type="checkbox"/> CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
5. Consolidate hazardous waste generated at a remove site?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. <input checked="" type="checkbox"/> REMOTE WASTE/CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)
6. Need to report the closure/removal of a tank that was classified waste and cleaned onsite?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. <input checked="" type="checkbox"/> HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)
<b>E. LOCAL REQUIREMENTS</b>		
Cal-ARP: California Accidental Release Prevention Program H&SC Chapter 6.95, Article 2, §25531 et seq — Stationary Source with more than a Threshold Quantity of a Regulated Substance in a Process	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	15. <input checked="" type="checkbox"/> REGULATED SUBSTANCE REPORTING FORM (Orange County CUPA)



# HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD  DELETE  REVISED 1 JEM Truck Bodies Page 1 of 3 2

FACILITY ID#	3 0 0 3 5	4 3 8	BUSINESS NAME	Plumbing Pros by Chauvin's Inc DBA
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## I. FACILITY INFORMATION

CHEMICAL LOCATION	# 1 & # 9 outside/north wall & inside		
CONFIDENTIAL LOCATION EPCRA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	MAP #	12-04
		GRID #	3 E, E, G, & SE

## II. CHEMICAL INFORMATION

CHEMICAL NAME	Argon Compressed		WASTE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	TRADE SECRET	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
COMMON NAME	Same		* If EPCRA see instructions		An EHS Chemical	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
CAS #	7440-37-1	FIRE CODE HAZARD CLASSES (supplied by GGF)		"If EHS is "Yes", all amounts must be LBS		
TYPE (Check one item only)	<input checked="" type="checkbox"/> a. PURE	<input type="checkbox"/> b. MIXTURE	<input type="checkbox"/> c. WASTE	RADIOACTIVE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CURIES
PHYSICAL STATE (Check one item only)	<input type="checkbox"/> a. SOLID	<input type="checkbox"/> b. LIQUID	<input checked="" type="checkbox"/> c. GAS	FED HAZARD CATEGORIES	<input type="checkbox"/> a. FIRE	<input type="checkbox"/> b. REACTIVE
					<input checked="" type="checkbox"/> c. PRESSURE RELEASE	<input type="checkbox"/> d. ACUTE HEALTH
					<input type="checkbox"/> e. CHRONIC HEALTH	
AVERAGE DAILY AMOUNT	300 cylinders	MAXIMUM DAILY AMOUNT	500 672	ANNUAL WASTE AMOUNT	N/A	
UNITS	<input type="checkbox"/> a. GALLONS	<input checked="" type="checkbox"/> b. CUBIC FEET	DAYS ON SITE	365	LARGEST CONTAINER	336 CF
	<input type="checkbox"/> c. POUNDS	<input type="checkbox"/> d. TONS				
STORAGE CONTAINER (Check all that apply)	<input type="checkbox"/> a. ABOVEGROUND TANK	<input type="checkbox"/> e. PLASTIC DRUM	<input type="checkbox"/> i. VAT	<input checked="" type="checkbox"/> m. CYLINDER	<input type="checkbox"/> q. TANK WAGON	
	<input type="checkbox"/> b. UNDERGROUND TANK	<input type="checkbox"/> f. NONMETALLIC DRUM	<input type="checkbox"/> j. FIBER DRUM	<input type="checkbox"/> n. GLASS CONTAINER	<input type="checkbox"/> r. RAIL CAR	
	<input type="checkbox"/> c. TANK INSIDE BLDG	<input type="checkbox"/> g. METAL CONTAINER	<input type="checkbox"/> k. BAG(S)	<input type="checkbox"/> o. PLASTIC CONTAINER	<input type="checkbox"/> s. TOTE BIN	
	<input type="checkbox"/> d. STEEL DRUM	<input type="checkbox"/> h. CARBOY	<input type="checkbox"/> l. BOX(S)	<input type="checkbox"/> p. IN MACH OR EQUIP	<input type="checkbox"/> t. OTHER	
STORAGE PRESSURE	<input type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT			
STORAGE TEMPERATURE	<input type="checkbox"/> a. AMBIENT	<input type="checkbox"/> b. ABOVE AMBIENT	<input type="checkbox"/> c. BELOW AMBIENT <input type="checkbox"/> d. CRYOGENIC			

%WT	HAZARDOUS COMPONENT (For mixture or waste only)	EHS	CAS #
1	29	<input type="checkbox"/> Yes <input type="checkbox"/> No	30 31 32
2	29	<input type="checkbox"/> Yes <input type="checkbox"/> No	30 31 32
3	29	<input type="checkbox"/> Yes <input type="checkbox"/> No	30 31 32
4	29	<input type="checkbox"/> Yes <input type="checkbox"/> No	30 31 32
5	29	<input type="checkbox"/> Yes <input type="checkbox"/> No	30 31 32

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

## PLACARDING INFORMATION

UNDOT #	UN1006	33	
	Refer to shipping papers or MSDS		
DOT HAZARD CLASS	2.2	34	
	Refer to shipping papers or MSDS		
EPCRA	<input type="checkbox"/> YES <input type="checkbox"/> NO	35	
X		36	

MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED

## Praxair™ Material Safety Data Sheet

### 1. Chemical Product and Company Identification

<b>Product Name:</b> Argon (MSDS No. P-4563-F)	<b>Trade Name:</b> Argon
<b>Chemical Name:</b> Argon	<b>Synonyms:</b> Shielding Gas, Argon40
<b>Formula:</b> Ar	<b>Chemical Family:</b> (Rare Gas) Noble Gas
<b>Telephone:</b> <b>Emergencies:</b> 1-800-645-4633* <b>CHEMTREC</b> 1-800-424-9300* <b>Routine:</b> 1-800-PRAXAIR	<b>Company Name:</b> Praxair, Inc. 39 Old Ridgebury Road Danbury CT 06810-5113

*\*Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information contact your supplier, Praxair sales representative, or call 1-800-PRAXAIR (1-800-772-9247).*

### 2. Composition / Information on Ingredients

This section covers materials of manufacture only. See sections 10 and 16 for information on by-products generated during use, especially use in welding and cutting. For custom mixtures of this product request a Material Safety Data Sheet for each component. See Section 16 for important information about mixtures.

INGREDIENT NAME	CAS NUMBER	PERCENTAGE	OSHA PEL	ACGIH TLV-TWA
Argon	7440-37-1	>99%*	None currently established	Simple asphyxiant

*\*The symbol ">" means "greater than."*

### 3. Hazards Identification

#### EMERGENCY OVERVIEW

**CAUTION! High-pressure gas.  
Can cause rapid suffocation.  
May cause dizziness and drowsiness.  
Self-contained breathing apparatus may  
be required by rescue workers.  
Odor: None**

**THRESHOLD LIMIT VALUE:** Simple asphyxiant— ACGIH (1997) recommends a TLV-TWA of 5 mg/m<sup>3</sup> for welding fumes not otherwise classified (NOC) that may be generated during welding with this product. See section 16 for more information on welding hazards.



**EFFECTS OF A SINGLE (ACUTE) OVEREXPOSURE:**

**INHALATION**—Asphyxiant. Effects are due to lack of oxygen. Moderate concentrations may cause headache, drowsiness, dizziness, excitation, excesssalivation, vomiting, and unconsciousness. Lack of oxygen can kill

**SKIN CONTACT**—No harm expected

**SWALLOWING**—This product is a gas at normal temperature and pressure.

**EYE CONTACT**—No harm expected

**EFFECTS OF REPEATED (CHRONIC) OVEREXPOSURE:** No harm expected

**OTHER EFFECTS OF OVEREXPOSURE:** Argon is an asphyxiant. Lack of oxygen can kill

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** The toxicology and the physical and chemical properties of argonsuggest that overexposure is unlikely to aggravate existing medical conditions.

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:** None known.

**CARCINOGENICITY:** Argon is not listed by NTP, OSHA, or IARC.

**4. First Aid Measures**

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.

**SKIN CONTACT:** Flush with water.

**SWALLOWING:** This product is a gas at normal temperature and pressure.

**EYE CONTACT:** Flush eyes with warm water. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly.

*NOTES TO PHYSICIAN: There is no specific antidote. This product is inert. Treatment of over-exposure should be directed at the control of symptoms and the clinical condition. Refer to section 16.*

**5. Fire Fighting Measures**

<b>FLASH POINT</b> (test method)	Not applicable	<b>AUTOIGNITION</b> <b>TEMPERATURE</b>	Not applicable
<b>FLAMMABLE LIMITS</b> <b>IN AIR, % by volume</b>	<b>LOWER</b>	Not applicable	<b>UPPER</b> Not applicable

**EXTINGUISHING MEDIA:** Argon cannot catch fire. Use media appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:**

**CAUTION! High-pressure gas.** Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool, then move them away from fire area if without risk. Self-contained breathing apparatus may be required by rescue workers. On-site fire brigades must comply with OSHA 29 CFR 1910.156.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Argon cannot catch fire. Heat of fire can build pressure in cylinder and cause it to rupture. No part of cylinder should be subjected to a temperature higher than 125°F (52°C). Argon cylinders are equipped with a pressure relief device (Exceptions may exist where authorized by DOT.)

**HAZARDOUS COMBUSTION PRODUCTS:** None known.

## 6. Accidental Release Measures

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

**CAUTION! High-pressure gas.** Argon is an asphyxiant. Lack of oxygen can kill. Evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Shut off flow without risk. Ventilate area or move cylinder to a well-ventilated area. Test for sufficient oxygen, especially in confined spaces, before allowing reentry.

**WASTE DISPOSAL METHOD:** Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state, and local regulations. If necessary, call your local supplier for assistance.

## 7. Handling and Storage

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125°F (52°C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. Never apply flame or localized heat directly to any part of the cylinder. High temperatures may damage the cylinder and could cause the pressure relief device to fail prematurely, venting the cylinder contents. Never strike an arc on a compressed gas cylinder or make a cylinder part of an electrical circuit. For other precautions in using argon, see section 16.

## 8. Exposure Controls/Personal Protection

### VENTILATION/ENGINEERING CONTROLS:

**LOCAL EXHAUST**—Use a local exhaust system, if necessary, to prevent oxygen deficiency and keep hazardous fumes and gases below applicable TLVs in the worker's breathing zone.

**MECHANICAL (general)**—General exhaust ventilation may be acceptable if it can maintain an adequate supply of air and keep hazardous fumes and gases below the applicable TLVs in the worker's breathing zone.

**SPECIAL**—None

**OTHER**—None

**RESPIRATORY PROTECTION:** Use air-purifying or air-supplied respirators, as appropriate, where local or general exhaust ventilation is inadequate. Adequate ventilation must keep worker exposure below applicable TLVs for fumes, gases and other by-products of welding with argon. See sections 3, 10, and 16 for details. An air-supplied respirator must be used in confined spaces. Respiratory protection must conform to OSHA rules as specified in 29 CFR 1910.134.

**SKIN PROTECTION:** Wear work gloves when handling cylinders; welding gloves for welding.

**EYE PROTECTION:** Wear safety glasses when handling cylinders. For welding, see section 16.

**OTHER PROTECTIVE EQUIPMENT:** Metatarsal shoes for cylinder handling. Select in accordance with OSHA 29 CFR 1910.132 and 1910.133. For welding, see section 16. Regardless of protective equipment, never touch live electrical parts.

### 9. Physical and Chemical Properties

<b>MOLECULAR WEIGHT:</b> 39.95	<b>EXPANSION RATIO:</b> Not applicable
<b>SPECIFIC GRAVITY (air=1):</b> At 70°F (21.1°C) and 1 atm: 1.38	<b>SOLUBILITY IN WATER:</b> % by wt., vol/vol at 32°F (0°C): 0.056
<b>GAS DENSITY:</b> At 70°F (21.1°C) and 1 atm: 0.103 lbs/ft <sup>3</sup> (1.650 kg/m <sup>3</sup> )	<b>VAPOR PRESSURE:</b> AT 68°F (20°C): Not applicable
<b>PERCENT VOLATILES BY VOLUME:</b> 100	<b>EVAPORATION RATE:</b> Gas, not applicable
<b>BOILING POINT (1 atm):</b> -302.6°F (-185.9°C)	<b>pH:</b> Not applicable
<b>MELTING POINT (1 atm):</b> -308.6°F (-189.2°C)	

**APPEARANCE, ODOR, AND STATE:** Colorless, odorless, tasteless gas at normal temperature and pressure.

### 10. Stability and Reactivity

<b>STABILITY:</b>	Unstable		Stable	X
<b>INCOMPATIBILITY (materials to avoid):</b> None currently known. Argon is chemically inert.				
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b> Ozone and nitrogen oxides may be formed by radiation from arc. (See section 16.) Other decomposition products of normal operation originate from volatilization, reaction, or oxidation of the material being worked.				
<b>HAZARDOUS POLYMERIZATION:</b>	May Occur		Will Not Occur	X

**CONDITIONS TO AVOID:** None currently known.

### 11. Toxicological Information

Argon is a simple asphyxiant.

### 12. Ecological Information

No adverse ecological effects expected. Argon does not contain any Class I or Class II ozone-depleting chemicals. Argon is not listed as a marine pollutant by DOT.

### 13. Disposal Considerations

**WASTE DISPOSAL METHOD:** Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier. For emergency disposal, secure cylinder in a well-ventilated area or outdoors, then slowly discharge gas to the atmosphere.



**14. Transport Information**

<b>DOT/IMO SHIPPING NAME:</b> Argon, compressed	<b>HAZARD CLASS:</b> 2.2
<b>IDENTIFICATION NUMBER:</b> UN 1006	<b>PRODUCT RQ:</b> Not applicable
<b>SHIPPING LABEL(s):</b> NONFLAMMABLE GAS	<b>PLACARD (When required):</b> NONFLAMMABLE GAS

**SPECIAL SHIPPING INFORMATION:** Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of a vehicle can present serious safety hazards.

Shipment of compressed gas cylinders that have been filled without the owner's consent is a violation of federal law [49 CFR 173.301(b)].

**15. Regulatory Information**

The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, state, and local regulations.

**U.S. FEDERAL REGULATIONS:**

**EPA (Environmental Protection Agency)**

**CERCLA:** Comprehensive Environmental Response, Compensation and Liability Act of 1980 (40 CFR Parts 117 and 302):

**Reportable Quantity (RQ):** None

**SARA:** Superfund Amendment and Reauthorization Act:

- **SECTIONS 302/304:** Require emergency planning based on Threshold Planning Quantity (TPQ) and release reporting based on Reportable Quantities (RQ) of extremely hazardous substances (40 CFR Part 355):

**Threshold Planning Quantity (TPQ):** None.

**Extremely Hazardous Substances (40 CFR 355):** None.

- **SECTIONS 311/312:** Require submission of Material Safety Data Sheets (MSDSs) and chemical inventory reporting with identification of EPA hazard categories. The hazard categories for this products are as follows:

**IMMEDIATE:** No

**DELAYED:** No

**PRESSURE:** Yes

**REACTIVITY:** No

**FIRE:** No

- **SECTION 313:** Requires submission of annual reports of release of toxic chemicals that appear in 40 CFR Part 372.

Argon does not require reporting under Section 313.

**40 CFR 68: Risk Management Program for Chemical Accidental Release Prevention**  
Requires development and implementation of risk management programs at facilities that manufacture, use, store, or otherwise handle regulated substances in quantities that exceed specified thresholds.

Argon is not listed as a regulated substance.

**TSCA: Toxic Substances Control Act:** Argon is listed on the TSCA inventory.

**OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION):**

**29 CFR 1910.119 : Process Safety Management of Highly Hazardous Chemicals:** Requires facilities to develop a process safety management program based on Threshold Quantities (TQ) of highly hazardous chemicals.

Argon is not listed in Appendix A as a highly hazardous chemical.

**STATE REGULATIONS:**

**CALIFORNIA:** This product is not listed by California under the Safe Drinking Water Toxic Enforcement Act of 1986 (Proposition 65).

**PENNSYLVANIA:** This product is subject to the Pennsylvania Worker and Community Right-To-Know Act (35 P.S. Sections 7301-7320).

**16. Other Information**

**ADDITIONAL SAFETY AND HEALTH HAZARDS:** Using argon in welding and cutting may create additional hazards:

**FUMES AND GASES** can be dangerous to your health and may cause serious lung disease.

- **Keep your head out of fumes. Do not breathe fumes and gases. Use enough ventilation, local exhaust, or both to keep fumes and gases from your breathing zone and the general area. Short term overexposure to fumes may result in dizziness, nausea, dryness or irritation of nose, throat, and eyes or other similar discomfort.**

Fumes and gases cannot be classified simply. The amount and type depend on the metal being worked and the process, procedure, equipment, and supplies used. Possible dangerous materials may be found in fluxes, electrodes, and other materials. Get a Material Safety Data Sheet (MSDS) for every material you use.

Contaminants in the air may add to the hazard of fumes and gases. One such contaminant, chlorinated hydrocarbon vapors from cleaning and degreasing activities, poses a special risk.

- **Do not use electric arcs in the presence of chlorinated hydrocarbon vapors—highly toxic phosgene may be produced.**

Metal coatings such as paint, plating, or galvanizing may generate harmful fumes when heated. Residues from cleaning materials may also be harmful.

- **Avoid arc operations on parts with phosphate residues (anti-rust, cleaning preparations)—highly toxic phosphine may be produced.**

To find the quantity and content of fumes and gases, you can take air samples. By analyzing these samples, you can find out what respiratory protection you need. One recommended sampling

method is to take air from inside the worker's helmet or from the worker's breathing zone. See ANSI/AWSF1.1, available from the American Welding Society, 550 N.W. Le Jeune Rd., Miami, FL 33126.

For other safe practices information and a more detailed description of the health hazards of welding and their consequences, see your welding products supplier.

#### **NOTES TO PHYSICIAN:**

*Acute:* Gases, fumes, and dusts may cause irritation to the eyes, lungs, nose, and throat. Some toxic gases associated with welding and related processes may cause pulmonary edema, asphyxiation, and death. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty breathing, frequent coughing, or chest pains.

*Chronic:* Protracted inhalation of air contaminants may lead to their accumulation in the lungs, a condition that may be seen as dense areas on chest x-rays. The severity of change is proportional to the length of exposure. The changes seen are not necessarily associated with symptoms or signs of reduced lung function or disease. In addition, the changes on x-rays may be caused by non-work-related factors such as smoking, etc.

#### **PROTECTIVE CLOTHING AND EQUIPMENT FOR WELDING OPERATIONS:**

**PROTECTIVE GLOVES:** Wear welding gloves.

**EYE PROTECTION:** Wear a helmet or use a face shield with a filter lens. Select lens per ANSI Z49.1. Provide protective screens and flash goggles if needed to protect others; select per OSHA 29 CFR 1910.133.

**OTHER PROTECTIVE EQUIPMENT:** Wear hand, head, and body protection. (See ANSI Z49.1.) Worn as needed, these help prevent injury from radiation, sparks, and electrical shock. Minimum protection includes welder's gloves and a face shield. For added protection consider arm protectors, aprons, hats, shoulder protection, and dark, substantial clothing. Regardless of protective equipment, never touch live electrical parts.

**OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:** *Arcs and sparks can ignite combustible materials.* Prevent fires. Refer to NFPA 51B, "Cutting and Welding Processes." *High pressure gas.* Use piping and equipment adequately designed to withstand pressures to be encountered. *Prevent reverse flow.* Reverse flow into cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. *Gas can cause rapid suffocation* due to oxygen deficiency. Store and use with adequate ventilation. Close valve after each use; keep closed even when empty. *Do not strike an arc on the cylinder.* The defect produced by an arc burn could lead to cylinder rupture. *Never work on a pressurized system.* If there is a leak, close the cylinder valve. Blow the system down in a safe and environmentally sound manner in compliance with all federal, state and local laws; then repair the leak. *Never ground a compressed gas cylinder or allow it to become part of an electrical circuit.*

Read and understand the manufacturer's instructions and the precautionary label on the product. See American National Standard Z49.1, "Safety In Welding and Cutting," published by the American Welding Society and OSHA Publication 2206 (29 CFR 1910), U.S. Government Printing Office, Washington, DC 20402 for more details. For further safety and health information, ask your welding products supplier for manufacturers' safety publications.

**MIXTURES:** When you mix two or more gases or liquefied gases, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist, or other trained person when you evaluate the end product.

**HAZARD RATING SYSTEMS:**

**NFPA RATINGS:**

HEALTH = 0

FLAMMABILITY = 0

REACTIVITY = 0

SPECIAL SA (CGA recommends this rating to designate Simple Asphyxiant.)

**HMIS RATINGS:**

HEALTH = 0

FLAMMABILITY = 0

REACTIVITY = 0

**STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:**

<b>THREADED:</b>	0-3000 psig	CGA-580
	3001-5500 psig	CGA-680
	5001-7500 psig	CGA-677
<b>PIN-INDEXED YOKE:</b>	0-3000 psig	CGA-960 (Medical Use)
<b>ULTRA-HIGH-INTEGRITY CONNECTION:</b>	0-3000 psig	CGA-718

Use the proper CGA connections. **DO NOT USE ADAPTERS.** See pamphlet CGA V-1 listed below.

Ask your supplier about free Praxair safety literature as referenced on the label for this product; you may also obtain copies by calling 1-800-PRAXAIR. Further information about argon can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 1725 Jefferson Davis Highway, Arlington, VA 22202-4102, Telephone (703) 412-0900.

- AV-1 *Safe Handling and Storage of Compressed Gases*
- G-11.1 *Commodity Specification for Argon*
- P-1 *Safe Handling of Compressed Gases in Containers*
- P-9 *Inert Gases—Argon, Nitrogen, and Helium*
- P-14 *Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmospheres*
- SB-2 *Oxygen-Deficient Atmospheres*
- V-1 *Compressed Gas Cylinder Valve Inlet and Outlet Connections Handbook of Compressed Gases, Third Edition*

Product: Argon

Form No.: P-4563-F

Date: October 1997

Praxair asks users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents and contractors of the information on this MSDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.



Product: Argon

Form No.: P-4563-F

Date: October 1997

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The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair, Inc., it is the user's obligation to determine the conditions of safe use of the product.

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Praxair MSDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current Praxair MSDSs for these products, contact your Praxair sales representative or local distributor or supplier. If you have questions regarding Praxair MSDSs, would like the form number and date of the latest MSDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center ( **Phone:** 1-800-PRAXAIR; **Address:** Praxair Call Center, Praxair, Inc., PO Box 44, Tonawanda, NY 14150-7891).

Praxair is a trademark of Praxair Technology, Inc.

Praxair, Inc.  
39 Old Ridgebury Road  
Danbury CT 06810-5113





## Praxair Material Safety Data Sheet

### 1. Chemical Product and Company Identification

<b>Product Name:</b> Compressed gases, n.o.s. (argon, carbon dioxide) (MSDS No. P-4715-F)	<b>Trade Name:</b> STARGOLD C10, C15, C18, C20, C25, C40, C50 Shielding Gas Mixtures (This product is intended for electric welding use.)
<b>Chemical Name:</b> Mixtures of argon and carbon dioxide	<b>Synonyms:</b> Not applicable
<b>Formula:</b> Mixtures of Ar and CO <sub>2</sub>	<b>Chemical Family:</b> Not applicable
<b>Telephone: Emergencies:</b> 1-800-645-4633* <b>CHEMTREC:</b> 1-800-424-9300* <b>Routine:</b> 1-800-PRAXAIR	<b>Company Name:</b> Praxair, Inc. 39 Old Ridgebury Road Danbury, CT 06810-5113

*\* Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your supplier, Praxair sales representative, or call 1-800-PRAXAIR (1-800-772-9247).*

### 2. Composition/Information on Ingredients

This section covers materials of manufacture only. See sections 3, 8, 10, 11, 15, and 16 for information on by-products generated during use, especially use in welding and cutting. For custom mixtures of this product, request an MSDS for each component. See section 16 for important information about mixtures.

INGREDIENT	CAS NUMBER	CONCENTRATION	OSHA PEL	ACGIH TLV-TWA
Carbon Dioxide	124-38-9	10-50%	5000 ppm	5000 ppm*
Argon	7440-37-1	50-90%	None currently established	Simple asphyxiant

\* See section 3.

### 3. Hazards Identification

#### EMERGENCY OVERVIEW

**CAUTION! High-pressure gas.**  
**Can cause rapid suffocation.**  
**Can increase respiration and heart rate.**  
**May cause nervous system damage.**  
**May cause dizziness and drowsiness.**  
**Self-contained breathing apparatus may be required by rescue workers.**  
**Odor: None**

**THRESHOLD LIMIT VALUE:** TLV-TWA, 5,000 ppm, carbon dioxide (ACGIH, 1998). TLV-TWA, 15 min STEL, 30,000 ppm, carbon dioxide ACGIH recommends a TLV-TWA of 5 mg/m<sup>3</sup> for welding

Product: Mixtures of Argon and P-4715-F  
At Least 10% Carbon Dioxide

Date: May 1999

fumes not otherwise classified (NOC) that may be generated during welding with this product. TLV-TWAs should be used as a guide in the control of health hazards and not as fine lines between safe and dangerous concentrations.

**EFFECTS OF A SINGLE (ACUTE) OVEREXPOSURE:**

**INHALATION**—Asphyxiant. Effects are due to lack of oxygen. The carbon dioxide component is also physiologically active, affecting circulation and breathing. Moderate concentrations may cause headache, drowsiness, dizziness, stinging of the nose and throat, excitation, rapid breathing and heart rate, excess salivation, vomiting, and unconsciousness. Lack of oxygen can kill.

**SKIN CONTACT**—No harm expected.

**SWALLOWING**—This product is a gas at normal temperature and pressure.

**EYE CONTACT**—No harm expected.

**EFFECTS OF REPEATED (CHRONIC) OVEREXPOSURE:** No harm expected.

**OTHER EFFECTS OF OVEREXPOSURE:** Possible damage to retinal ganglion cells and central nervous system.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** The toxicology and the physical and chemical properties of this product suggest that overexposure is unlikely to aggravate existing medical conditions.

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:** A single study has shown an increase in heart defects in rats exposed to 6% carbon dioxide in air for 24 hours at different times during gestation. There is no evidence that carbon dioxide is teratogenic in humans.

**CARCINOGENICITY:** Neither component of this mixture is listed by NTP, OSHA, or IARC.

**4. First Aid Measures**

**INHALATION:** Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.

**SKIN CONTACT:** Wash with soap and water. If irritation persists, seek medical attention.

**SWALLOWING:** This product is a gas at normal temperature and pressure.

**EYE CONTACT:** Flush eyes with water. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Get medical attention if discomfort persists.

**NOTES TO PHYSICIAN:** *There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.*

**5. Fire Fighting Measures**

<b>FLASH POINT (test method)</b>	Not applicable	<b>AUTOIGNITION TEMPERATURE</b>	Not applicable
<b>FLAMMABLE LIMITS IN AIR, % by volume</b>	<b>LOWER</b>	Not applicable	<b>UPPER</b> Not applicable

**EXTINGUISHING MEDIA:** This mixture cannot catch fire. Use media appropriate for surrounding fire.

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**SPECIAL FIRE FIGHTING PROCEDURES: CAUTION! High-pressure gas.** Asphyxiant— lack of oxygen can kill. Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool, then move them away from fire area if without risk. Self-contained breathing apparatus may be required by rescue workers. On-site fire brigades must comply with OSHA 29 CFR 1910.156.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Heat of fire can build pressure in cylinder and cause it to rupture. No part of cylinder should be subjected to a temperature higher than 125°F (52°C). Cylinders containing this mixture are equipped with a pressure relief device. (Exceptions may exist where authorized by DOT.)

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide, carbon monoxide

## 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: CAUTION! High-pressure gas.** Asphyxiant. Lack of oxygen can kill. Evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Shut off flow if you can do so without risk. Ventilate area or move cylinder to a well-ventilated area. Test for sufficient oxygen, especially in confined spaces, before allowing reentry.

**WASTE DISPOSAL METHOD:** Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with federal, state, and local regulations. If necessary, call your local supplier for assistance.

## 7. Handling and Storage

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125°F (52°C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. Never apply flame or localized heat directly to any part of the cylinder. High temperatures may damage the cylinder and could cause the pressure relief device to fail prematurely, venting the cylinder contents. For other precautions in using this mixture, see section 16.

For additional information on storage and handling, refer to Compressed Gas Association (CGA) pamphlet P-1, *Safe Handling of Compressed Gases in Containers*, available from the CGA. Refer to section 16 for the address and phone number along with a list of other available publications.



### 8. Exposure Controls/Personal Protection

#### VENTILATION/ENGINEERING CONTROLS:

**LOCAL EXHAUST**—Preferred. Use a local exhaust system, if necessary, to prevent oxygen deficiency and to keep hazardous fumes and gases below applicable TLVs in the worker's breathing zone.

**MECHANICAL (general)**—General exhaust ventilation may be acceptable if it can maintain an adequate supply of air and keep hazardous fumes and gases below the applicable TLVs in the worker's breathing zone.

**SPECIAL**—None

**OTHER**—None

**RESPIRATORY PROTECTION:** Use air-purifying or air-supplied respirators, as appropriate, where local or general exhaust ventilation is inadequate. Adequate ventilation must keep worker exposure below applicable TLVs for fumes, gases and other by-products of welding with this mixture. See sections 3, 10, 15, and 16 for details. An air-supplied respirator must be used in confined spaces. Respiratory protection must conform to OSHA rules as specified in 29 CFR 1910.134.

**SKIN PROTECTION:** Wear work gloves for cylinder handling, welding gloves for welding and cutting.

**EYE PROTECTION:** Wear safety glasses when handling cylinders. For welding, see section 16.

**OTHER PROTECTIVE EQUIPMENT:** Metatarsal shoes for cylinder handling. Select in accordance with OSHA 29 CFR 1910.132 and 1910.133. For welding, see section 16. Regardless of protective equipment, never touch live electrical parts.

### 9. Physical and Chemical Properties

**SPECIFIC GRAVITY** (Air = 1) at 70°F (21.1°C) and 1 atm: 1.39-1.45

**SOLUBILITY IN WATER**, vol/vol at 32°F (0°C) and 1 atm: Negligible

**PERCENT VOLATILES BY VOLUME:** 100

**APPEARANCE, ODOR, AND STATE:** Colorless, odorless gas at normal temperature and pressure

### 10. Stability and Reactivity

**STABILITY:**  Unstable  Stable

**INCOMPATIBILITY (materials to avoid):** Alkali metals, alkaline earth metals, metal acetylides, chromium, titanium above 1022°F (550°C), uranium above 1382°F (750°C), magnesium above 1427°F (775°C).

**HAZARDOUS DECOMPOSITION PRODUCTS:** The arc may form gaseous reaction products such as carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from the arc. See section 16. Other decomposition products of normal operation originate from the volatilization, reaction, or oxidation of the material being worked.

**HAZARDOUS POLYMERIZATION:**  May Occur  Will Not Occur

**CONDITIONS TO AVOID:** None known.

### 11. Toxicological Information

The welding process may generate hazardous fumes and gases. (See sections 3, 10, 15 and 16.)

Carbon dioxide is an asphyxiant. It initially stimulates respiration and then causes respiratory depression. High concentrations result in narcosis. Symptoms in humans are as follows:

<u>EFFECT:</u>	<u>CONCENTRATION:</u>
Breathing rate increases slightly.	1%
Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness.	2%
Breathing increases to twice normal rate and becomes labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate.	3%
Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt.	4 - 5%
Characteristic sharp odor noticeable. Very labored breathing, headache, visual impairment, and ringing in the ears. Judgment may be impaired, followed within minutes by loss of consciousness.	5 - 10%
Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation.	50 - 100%

### 12. Ecological Information

No adverse ecological effects expected. This mixture does not contain any Class I or Class II ozone-depleting chemicals. Neither component of this mixture is listed as a marine pollutant by DOT.

### 13. Disposal Considerations

**WASTE DISPOSAL METHOD:** Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

### 14. Transport Information

**DOT/IMO SHIPPING NAME:** Compressed gases, n.o.s. (argon, carbon dioxide)

<b>HAZARD CLASS:</b> 2.2	<b>IDENTIFICATION NUMBER:</b> UN 1956	<b>PRODUCT RQ:</b> Not applicable
<b>SHIPPING LABEL(s):</b>	NONFLAMMABLE GAS	
<b>PLACARD (when required):</b>	NONFLAMMABLE GAS	

**SPECIAL SHIPPING INFORMATION:** Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of a vehicle can present serious safety hazards.

Shipment of compressed gas cylinders that have been filled without the owner's consent is a violation of federal law [49 CFR 173.301(b)].

## 15. Regulatory Information

The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, state, and local regulations.

### U.S. FEDERAL REGULATIONS:

#### EPA (ENVIRONMENTAL PROTECTION AGENCY)

**CERCLA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT OF 1980 (40 CFR Parts 117 and 302):**

**Reportable Quantity (RQ):** None

#### ~~SARA: SUPERFUND AMENDMENT AND REAUTHORIZATION ACT:~~

**SECTIONS 302/304:** Require emergency planning based on Threshold Planning Quantity (TPQ) and release reporting based on Reportable Quantities (RQ) of extremely hazardous substances (40 CFR Part 355):

**Threshold Planning Quantity (TPQ):** None

**Extremely Hazardous Substances (40 CFR 355):** None

**SECTIONS 311/312:** Require submission of MSDSs and reporting of chemical inventories with identification of EPA hazard categories. The hazard categories for this product are as follows:

**IMMEDIATE:** Yes

**DELAYED:** No

**PRESSURE:** Yes

**REACTIVITY:** No

**FIRE:** No

**SECTION 313:** Requires submission of annual reports of release of toxic chemicals that appear in 40 CFR Part 372.

Neither component of this mixture requires reporting under Section 313.

**40 CFR 68: RISK MANAGEMENT PROGRAM FOR CHEMICAL ACCIDENTAL RELEASE PREVENTION:** Requires development and implementation of risk management programs at facilities that manufacture, use, store, or otherwise handle regulated substances in quantities that exceed specified thresholds.

Neither component of this mixture is listed as a regulated substance.

**TSCA: TOXIC SUBSTANCES CONTROL ACT:** Both components of this mixture are listed on the TSCA inventory.

#### OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION:

**29 CFR 1910.119: PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS:** Requires facilities to develop a process safety management program based on Threshold Quantities (TQ) of highly hazardous chemicals.

Neither component of this mixture is listed in Appendix A as a highly hazardous chemical.

Product: Mixtures of Argon and  
At Least 10% Carbon Dioxide

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Date: May 1999

#### STATE REGULATIONS:

**CALIFORNIA:** Neither component of this mixture is listed by California under the SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (Proposition 65).

**WARNING:** The combustion of carbon dioxide produces carbon monoxide— a chemical known to the State of California to cause birth defects or other reproductive harm.

*(California Health and Safety Code §25249.5 et seq.)*

**PENNSYLVANIA:** Both components of this mixture are subject to the PENNSYLVANIA WORKER AND COMMUNITY RIGHT-TO-KNOW ACT (35 P.S. Sections 7301-7320).

### 16. Other Information

Be sure to read and understand all labels and instructions supplied with all containers of this product.

**ADDITIONAL SAFETY AND HEALTH HAZARDS:** Using this product in welding and cutting may create additional hazards:

**FUMES AND GASES** can be dangerous to your health and may cause serious lung disease.

- **Keep your head out of fumes. Do not breathe fumes and gases. Use enough ventilation, local exhaust, or both to keep fumes and gases from your breathing zone and the general area. Short-term overexposure to fumes may cause dizziness, nausea, and dryness or irritation of the nose, throat, and eyes or may cause other similar discomfort.**

Fumes and gases cannot be classified simply. The amount and type depend on the metal being worked and the process, procedure, equipment, and supplies used. Possible dangerous materials may be found in fluxes, electrodes, and other materials. Get an MSDS for every material you use.

Contaminants in the air may add to the hazard of fumes and gases. One such contaminant, chlorinated hydrocarbon vapors from cleaning and degreasing activities, poses a special risk.

- **Do not use electric arcs in the presence of chlorinated hydrocarbon vapors— highly toxic phosgene may be produced.**

Metal coatings such as paint, plating, or galvanizing may generate harmful fumes when heated. Residues from cleaning materials may also be harmful.

- **Avoid arc operations on parts with phosphate residues (anti-rust, cleaning preparations)— highly toxic phosphine may be produced.**

To find the quantity and content of fumes and gases, you can take air samples. By analyzing these samples, you can find out what respiratory protection you need. One recommended sampling method is to take air from inside the worker's helmet or from the worker's breathing zone. See AWS F1.1, *Methods for Sampling and Analyzing Gases for Welding and Allied Processes*, available from the American Welding Society, 550 N.W. Le Jeune Rd., Miami, FL 33126.

Read and understand the manufacturer's instructions and the precautionary labels on the products used in welding and cutting. Ask your welding products supplier for a copy of Praxair's free safety booklet, P-52-529, *Precautions and Safe Practices for Electric Welding and Cutting*, and for other manufacturers' safety publications. For a detailed treatment, get ANSI Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, or see OSHA's Web site at <http://www.osha-slc.gov/SLTC/weldingcuttingbrazing/>

#### NOTES TO PHYSICIAN:

*Acute: Gases, fumes, and dusts may cause irritation to the eyes, lungs, nose, and throat. Some toxic gases associated with welding and related processes may cause pulmonary edema,*

*asphyxiation, and death. Acute overexposure may include signs and symptoms such as watery eyes, nose and throat irritation, headache, dizziness, difficulty breathing, frequent coughing, or chest pains.*

*Chronic: Protracted inhalation of air contaminants may lead to their accumulation in the lungs, a condition that may be seen as dense areas on chest x-rays. The severity of change is proportional to the length of exposure. The changes seen are not necessarily associated with symptoms or signs of reduced lung function or disease. In addition, the changes on x-rays may be caused by non-work-related factors such as smoking, etc.*

#### PROTECTIVE CLOTHING AND EQUIPMENT FOR WELDING OPERATIONS:

**PROTECTIVE GLOVES:** Wear welding gloves.

**EYE PROTECTION:** Wear a helmet or use a face shield with a filter lens. Select lens per ANSI Z49.1. Provide protective screens and flash goggles if needed to protect others; select per OSHA 29 CFR 1910.133.

**OTHER PROTECTIVE EQUIPMENT:** Wear hand, head, and body protection. (See ANSI Z49.1.) Worn as needed, these help prevent injury from radiation, sparks, and electrical shock. Minimum protection includes welder's gloves and a face shield. For added protection, consider arm protectors, aprons, hats, shoulder protection, and dark, substantial clothing.

**OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:** *High-pressure gas.* Use piping and equipment adequately designed to withstand pressures to be encountered. *Can cause rapid suffocation due to oxygen deficiency.* Store and use with adequate ventilation. Close cylinder valve after each use; keep closed even when empty. *Arcs and sparks can ignite combustible materials.* Prevent fires. For more information on fire prevention in welding and cutting, see NFPA 51B *Standard for Fire Prevention During Welding, Cutting, and Other Hotwork*, published by the National Fire Protection Association. *Do not strike an arc on the cylinder.* The defect produced by an arc burn could lead to cylinder rupture. *Never work on a pressurized system.* If there is a leak, close the cylinder valve. Blow the system down in a safe and environmentally sound manner in compliance with all federal, state, and local laws; then repair the leak. *Never place a compressed gas cylinder where it may become part of an electrical circuit.* When using compressed gases in and around electric welding applications, never ground the cylinders. Grounding exposes the cylinders to damage by the electric welding arc.

**MIXTURES:** When you mix two or more gases or liquefied gases, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Remember, gases and liquids have properties that can cause serious injury or death.

#### HAZARD RATING SYSTEMS:

##### NFPA RATINGS:

HEALTH = 1  
FLAMMABILITY = 0  
REACTIVITY = 0  
SPECIAL = None

##### HMS RATINGS:

HEALTH = 0  
FLAMMABILITY = 0  
REACTIVITY = 0



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At Least 10% Carbon Dioxide

P-4715-F

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**STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:**

**THREADED:** CGA-580  
**PIN-INDEXED YOKE:** Not applicable  
**ULTRA-HIGH-INTEGRITY CONNECTION:** Not applicable

Use the proper CGA connections. **DO NOT USE ADAPTERS.** Additional limited-standard connections may apply. See CGA pamphlets V-1 and V-7 listed below.

Ask your supplier about free Praxair safety literature as referred to in this MSDS and on the label for this product. Further information about this product can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 1725 Jefferson Davis Highway, Arlington, VA 22202-4102, Telephone (703) 412-0900.

AV-1 *Safe Handling and Storage of Compressed Gases*  
G-6 *Carbon Dioxide*  
G-6.2 *Commodity Specification for Carbon Dioxide*  
P-1 *Safe Handling of Compressed Gases in Containers*  
P-14 *Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmospheres*  
SB-2 *Oxygen-Deficient Atmospheres*  
V-1 *Compressed Gas Cylinder Valve Inlet and Outlet Connections*  
V-7 *Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures*  
— *Handbook of Compressed Gases, Third Edition*

Praxair asks users of this product to study this MSDS and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this MSDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

Product: Mixtures of Argon and P-4715-F  
At Least 10% Carbon Dioxide

Date: May 1999

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The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair, Inc., it is the user's obligation to determine the conditions of safe use of the product.

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Praxair MSDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current Praxair MSDSs for these products, contact your Praxair sales representative or local distributor or supplier. If you have questions regarding Praxair MSDSs, would like the form number and date of the latest MSDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center ( **Phone:** 1-800-PRAXAIR; **Address:** Praxair Call Center, Praxair, Inc., PO Box 44, Tonawanda, NY 14150-7891).

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Praxair, Inc.  
39 Old Ridgebury Road  
Danbury, CT 06810-5113



# HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

ADD  DELETE  REVISED 1

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FACILITY ID# 30035 438 BUSINESS NAME \_\_\_\_\_

## I. FACILITY INFORMATION

CHEMICAL LOCATION #5 Northwest corner near roll-up door

CONFIDENTIAL LOCATION EPCRA  Yes  No 5 MAP # 1204 6 GRID # 3C,E,G+5E

## II. CHEMICAL INFORMATION

CHEMICAL NAME Oxygen WASTE  Yes 8 TRADE NAME \_\_\_\_\_ 1

COMMON NAME \_\_\_\_\_ 9

CAS # 7782-44-7 10 FIRE CODE HAZARD CLASSES (supplied by \_\_\_\_\_) oxidizer

TYPE (Check one item only)  a PURE  b MIXTURE  c WASTE 14 HAZARDOUS  Yes  No 15 CUR \_\_\_\_\_

PHYSICAL STATE (Check one item only)  a SOLID  b LIQUID  c GAS 17 HAZARD CATEGORIES  a FLAMMABLE  b REACTIVE  c HIGH PRESSURE / EXPLOSIVE  d ACUTE HEALTH  e CHRONIC HEALTH

AVERAGE DAILY AMOUNT 2 cyl p/month <sup>500</sup> 19 MAXIMUM DAILY AMOUNT 225 20 ANN L WASTE AMOUNT N/A 21 STATE WASTE CODE N/A

UNITS  a GALLONS  b CUBIC FEET 23 DAYS ON SITE Rotates 365 24 LARGEST CONTAINER 275 cf

STORAGE CONTAINER (Check all that apply)  a ABOVEGROUND TANK  e PLASTIC DRUM  i VAT  m CYLINDER  n TANK VACUO  b UNDERGROUND TANK  f NONMETALLIC DRUM  j FIBER DRUM  o GLASS CONTAINER  p BALLOON  c TANK INSIDE BLDG  g METAL CONTAINER  k BAG(S)  o PLASTIC CONTAINER  q TOTE BIN  d STEEL DRUM  h CARBOY  l BOX(S)  p IN MACH OR EQUIP  r OTHER \_\_\_\_\_

STORAGE PRESSURE  a AMBIENT  b ABOVE AMBIENT  c BELOW AMBIENT

STORAGE TEMPERATURE  a AMBIENT  b ABOVE AMBIENT  c BELOW AMBIENT  d OTHER \_\_\_\_\_

%WT	HAZARDOUS COMPONENT (For mixtures or waste only)	EHS	GAS
1	29	<input type="checkbox"/> Yes <input type="checkbox"/> No 30	<input type="checkbox"/> Yes <input type="checkbox"/> No 31
2	29	<input type="checkbox"/> Yes <input type="checkbox"/> No 30	<input type="checkbox"/> Yes <input type="checkbox"/> No 31
3	29	<input type="checkbox"/> Yes <input type="checkbox"/> No 30	<input type="checkbox"/> Yes <input type="checkbox"/> No 31
4	29	<input type="checkbox"/> Yes <input type="checkbox"/> No 30	<input type="checkbox"/> Yes <input type="checkbox"/> No 31
5	29	<input type="checkbox"/> Yes <input type="checkbox"/> No 30	<input type="checkbox"/> Yes <input type="checkbox"/> No 31

If more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinogenic, attach additional sheets of paper capturing the required information.

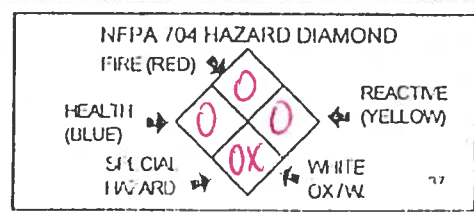
## PLACARDING INFORMATION

UNDOT # UN 1072 33 Refer to shipping papers or MSDS

DOT HAZARD CLASS 2.2 34 Refer to shipping papers or MSDS

EPCRA  YES  NO 35

X \_\_\_\_\_ 36 If EPCRA, Please Sign Here



MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED

## Praxair™ Material Safety Data Sheet

### 1. Chemical Product and Company Identification

<b>Product Name:</b> Oxygen (MSDS No. P-4638-D)	<b>Trade Name:</b> Oxygen
<b>Chemical Name:</b> Oxygen	<b>Synonyms:</b> Not applicable
<b>Formula:</b> O <sub>2</sub>	<b>Chemical Family:</b> Not applicable
<b>Telephone:</b> <b>Emergencies:</b> 1-800-645-4633* <b>CHEMTREC</b> 1-800-424-9300* <b>Routine:</b> 1-800-PRAXAIR	<b>Company Name:</b> Praxair, Inc. 39 Old Ridgebury Road Danbury CT 06810-5113

\*Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information contact your supplier, Praxair sales representative, or call 1-800-PRAXAIR (1-800-772-9247).

### 2. Composition / Information on Ingredients

For custom mixtures of this product request a Material Safety Data Sheet for each component. See Section 16 for important information about mixtures.

INGREDIENT NAME	CAS NUMBER	PERCENTAGE	OSHA PEL	ACGIH TLV-TWA
Oxygen	7782-44-7	>99%*	None currently established	None currently established

\*The symbol ">" means "greater than."

### 3. Hazards Identification

**EMERGENCY OVERVIEW**

**WARNING! High-pressure, oxidizing gas.**  
**Vigorously accelerates combustion.**  
**Self-contained breathing apparatus may**  
**be required by rescue workers.**  
**Odor: None**

**THRESHOLD LIMIT VALUE:** None currently established— ACGIH 1997 recommends a TLV-TWA of 0.5 mg/m<sup>3</sup> for welding fumes not otherwise classified (NOC) that may be generated during welding with this product. See section 16 for more information on welding hazards.

**EFFECTS OF A SINGLE (ACUTE) OVEREXPOSURE:**

**INHALATION**—Breathing 80% or more oxygen at atmospheric pressure for more than a few hours may cause nasal stuffiness, cough, sore throat, chest pain and breathing difficulty. Breathing oxygen at

higher pressure increases the likelihood of adverse effects within a shorter time period. Breathing pure oxygen under pressure may cause lung damage and also central nervous system effects resulting in dizziness, poor coordination, tingling sensation, visual and hearing disturbances, muscular twitching, unconsciousness and convulsions. Breathing oxygen under pressure may cause prolongation of adaptation to darkness and reduced peripheral vision.

**SKIN CONTACT**—No harm expected.

**SWALLOWING**—This product is a gas at normal temperature and pressure.

**EYE CONTACT**—No harm expected.

**EFFECTS OF REPEATED (CHRONIC) OVEREXPOSURE:** No harm expected.

**OTHER EFFECTS OF OVEREXPOSURE:** See section 11, Toxicological Information.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** See section 11, Toxicological Information.

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:** None known.

**CARCINOGENICITY:** Oxygen is not listed by NTP, OSHA, or IARC.

**4. First Aid Measures**

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. Keep victim warm and at rest. Call a physician. Advise the physician that the victim has been exposed to a high concentration of oxygen.**SKIN CONTACT:** No emergency care anticipated.

**SWALLOWING:** This product is a gas at normal temperature and pressure.

**EYE CONTACT:** No emergency care anticipated.

**NOTES TO PHYSICIAN:** Supportive treatment should include immediate sedation, anti-convulsive therapy if needed, and rest. See section 11, Toxicological Information.

**5. Fire Fighting Measures**

<b>FLASH POINT</b> (test method)	Not applicable	<b>AUTOIGNITION</b> <b>TEMPERATURE</b>	Not applicable
<b>FLAMMABLE LIMITS</b> <b>IN AIR, % by volume</b>	<b>LOWER</b>	Not applicable	<b>UPPER</b> Not applicable

**EXTINGUISHING MEDIA:** Vigorously accelerates combustion. Use media appropriate for surrounding fire. Water (e.g. safety shower) is the preferred extinguishing media for clothing fires.

**SPECIAL FIRE FIGHTING PROCEDURES:**

**WARNING! High-pressure, oxidizing gas.** Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool, then move them away from fire area if without risk. Self-contained breathing apparatus may be required by rescue workers. On-site fire brigades must comply with OSHA 29 CFR 1910.156.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Oxidizing agent; vigorously accelerates combustion. Contact with flammable materials may cause fire or explosion. Heat of fire can build pressure in cylinder and cause it to rupture. Oxygen cylinders are equipped with a pressure relief device (Exceptions may exist where authorized by DOT.) No part of a cylinder should be subjected to a temperature higher than



125F (52C). Smoking, flames, and electric sparks in the presence of enriched oxygen atmospheres are potential explosion hazards.

**HAZARDOUS COMBUSTION PRODUCTS:** None known.

### 6. Accidental Release Measures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

**WARNING! High-pressure, oxidizing gas.** Shut off flow if without risk. Ventilate area or move cylinder to well-ventilated area. Remove all flammable materials from vicinity. Oxygen must never be permitted to strike an oily surface, greasy clothes, or other combustible material.

**WASTE DISPOSAL METHOD:** Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state, and local regulations. If necessary, call your local supplier for assistance.

### 7. Handling and Storage

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store and use with adequate ventilation, away from oil, grease, and other hydrocarbons. Separate oxygen cylinders from flammables by at least 20 feet or use a barricade of noncombustible material. This barricade should be at least 5 feet high and have a fire resistance rating of at least ½ hour. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125°F (52°C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. Never apply flame or localized heat directly to any part of the cylinder. High temperatures may damage the cylinder and could cause the pressure relief device to fail prematurely, venting the cylinder contents. Never strike an arc on a compressed gas cylinder or make a cylinder part of an electrical circuit. For other precautions in using oxygen, see section 16.

**Precautions when using oxygen in welding and cutting:** Read and understand the manufacturer's instructions and the precautionary labels on the products. See American National Standards Institute (ANSI) Z49.1, *Safety in Welding and Cutting*, published by the American Welding Society, PO Box 351040, Miami, Florida 33135 and National Fire Protection Association (NFPA) 51, *Oxygen Fuel Gas Welding and Cutting*.

### 8. Exposure Controls/Personal Protection

**VENTILATION/ENGINEERING CONTROLS:**

**LOCAL EXHAUST**—Use a local exhaust system, if necessary, to prevent increased oxygen concentration and, in welding, to keep hazardous fumes and gases below applicable TLVs in the worker's breathing zone.

**MECHANICAL (general)**—General exhaust ventilation may be acceptable if it can maintain a supply of air that is not too rich in oxygen and, during welding, can keep hazardous fumes and gases below the applicable TLVs in the worker's breathing zone.

**SPECIAL**—None

**OTHER**—None

**RESPIRATORY PROTECTION:** None required under normal use. However, air-supplied respirators are required while working in confined spaces with this product. For welding, use air-purifying or air-supplied respirators, as appropriate, where local or general exhaust ventilation is inadequate. Adequate ventilation must keep worker exposure below applicable TLVs for fumes, gases and other by-products of welding with oxygen. See sections 3, 10, and 16 for details. The respiratory protection use must conform with OSHA rules as specified in 29 CFR 1910.134.

**SKIN PROTECTION:** Wear work gloves when handling cylinders; welding gloves for welding. Gloves must be free of oil and grease.

**EYE PROTECTION:** Wear safety glasses when handling cylinders. For welding, wear goggles with filter lens selected as per ANSI Z49.1. Provide protective screens and goggles, if necessary, to protect others. Select as per OSHA 29 CFR 1910.33

**OTHER PROTECTIVE EQUIPMENT:** Metatarsal shoes for cylinder handling. Select in accordance with OSHA 29 CFR 1910.132 and 1910.133. As needed for welding, wear hand, head, and body protection to help prevent injury from radiation and sparks. (See ANSI Z49.1.) At a minimum this includes welder's gloves and protective goggles, and may include arm protectors, aprons, hats, shoulder protection, as well as substantial clothing. Regardless of protective equipment, never touch live electrical parts.

**9. Physical and Chemical Properties**

<b>MOLECULAR WEIGHT:</b> 31.9988	<b>EXPANSION RATIO:</b> Not applicable
<b>SPECIFIC GRAVITY (air=1):</b> At 70°F (21.1°C) and 1 atm: 1.105	<b>SOLUBILITY IN WATER:</b> vol/vol at 32°F (0°C): 0.0491
<b>GAS DENSITY:</b> At 70°F (21.1°C) and 1 atm: 0.083279 lbs/ft <sup>3</sup> (1.326 kg/m <sup>3</sup> )	<b>VAPOR PRESSURE:</b> AT 68°F (20°C): Not applicable
<b>PERCENT VOLATILES BY VOLUME:</b> 100	<b>EVAPORATION RATE (Butyl Acetate=1):</b> Gas, not applicable
<b>BOILING POINT (1 atm):</b> -297.33°F (182.96°C)	<b>pH:</b> Not applicable
<b>FREEZING POINT (1 atm):</b> -361.8°F (-218.78°C )	

**APPEARANCE, ODOR, AND STATE:** Colorless, odorless, tasteless gas at normal temperature and pressure.

**10. Stability and Reactivity**

<b>STABILITY:</b>	Unstable	Stable	X
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**INCOMPATIBILITY (materials to avoid):** Combustible materials, asphalt, flammable materials, especially oils and greases. Oxygen reacts with many materials. See NFPA 491M, *Manual of Hazardous Chemical Reactions* for details.

HAZARDOUS DECOMPOSITION PRODUCTS: None.

HAZARDOUS POLYMERIZATION:	May Occur		Will Not Occur	X
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CONDITIONS TO AVOID: None currently known.

<b>11. Toxicological Information</b>
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At atmospheric concentration and pressure, oxygen poses no toxicity hazards. At high concentrations, newborn premature infants may suffer delayed retinal damage (retrolental fibroplasia) that can progress to retinal detachment and blindness. Retinal damage may also occur in adults exposed to 100% oxygen for extended periods (24 to 48 hours) or at greater than atmospheric pressure, particularly in individuals whose retinal circulation has been previously compromised. All individuals exposed for long periods to oxygen at high pressure and all who exhibit overt oxygen toxicity should have ophthalmologic examinations.

At two or more atmospheres, toxicity to the Central Nervous System (CNS) occurs. Symptoms include nausea, vomiting, dizziness or vertigo, muscle twitching, vision changes, and loss of consciousness and generalized seizures. At three atmospheres, CNS toxicity occurs in less than two hours; at six atmospheres, in only a few minutes.

Patients with chronic obstructive pulmonary disease retain carbon dioxide abnormally. If oxygen is administered, raising their blood oxygen concentration, their breathing becomes depressed and retained carbon dioxide rises to a dangerous level.

Animal studies suggest that the administration of certain drugs, including phenothiazine drugs and chloroquine, increases the susceptibility to toxicity from oxygen at high concentrations or pressures. Animal studies also indicate that vitamin E deficiency may increase susceptibility to oxygen toxicity.

Airway obstruction during high oxygen tension may cause alveolar collapse following absorption of the oxygen. Similarly, occlusion of the eustachian tubes may cause retraction of the eardrum and obstruction of the paranasal sinuses may produce vacuum-type headache.

<b>12. Ecological Information</b>
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No adverse ecological effects expected. Oxygen does not contain any Class I or Class II ozone-depleting chemicals. Oxygen is not listed as a marine pollutant by DOT.

<b>13. Disposal Considerations</b>
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**WASTE DISPOSAL METHOD:** Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier. For emergency disposal, secure cylinder in a well-ventilated area or outdoors, then slowly discharge gas to the atmosphere.

<b>14. Transport Information</b>
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<b>DOT/IMO SHIPPING NAME:</b> Oxygen, compressed	<b>HAZARD CLASS:</b> 2.2
<b>IDENTIFICATION NUMBER:</b> UN 1072	<b>PRODUCT RQ:</b> Not applicable
<b>SHIPPING LABEL(s):</b> OXYGEN. An oxygen label may be used for domestic shipment in the United States and Canada in place of the NONFLAMMABLE GAS and OXIDIZER labels (49 CFR Part 172).	
<b>PLACARD (When required):</b> Nonflammable gas or oxygen	
<b>SPECIAL SHIPPING INFORMATION:</b> Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of a vehicle can present serious safety hazards. Shipment of compressed gas cylinders that have been filled without the owner's consent is a violation of federal law [49 CFR 173.301(b)].	

<b>15. Regulatory Information</b>
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The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, state, and local regulations.

**U.S. FEDERAL REGULATIONS:****EPA (Environmental Protection Agency)**

**CERCLA:** Comprehensive Environmental Response, Compensation and Liability Act of 1980 (40 CFR Parts 117 and 302):

**Reportable Quantity (RQ):** None

**SARA:** Superfund Amendment and Reauthorization Act:

- **SECTIONS 302/304:** Require emergency planning based on Threshold Planning Quantity (TPQ) and release reporting based on Reportable Quantities (RQ) of extremely hazardous substances (40 CFR Part 355):

**Threshold Planning Quantity (TPQ):** None.

**Extremely Hazardous Substances (40 CFR 355):** None.

- **SECTIONS 311/312:** Require submission of Material Safety Data Sheets (MSDSs) and chemical inventory reporting with identification of EPA hazard categories. The hazard categories for this products are as follows:

IMMEDIATE: No

DELAYED: No

PRESSURE: Yes

REACTIVITY: No

FIRE: Yes

- **SECTION 313:** Requires submission of annual reports of release of toxic chemicals that appear in 40 CFR Part 372.

Oxygen does not require reporting under Section 313.

**40 CFR 68:** Risk Management Program for Chemical Accidental Release Prevention: Requires development and implementation of risk management programs at facilities that manufacture,

use, store, or otherwise handle regulated substances in quantities that exceed specified thresholds.

Oxygen is not listed as a regulated substance.

TSCA: Toxic Substances Control Act: Oxygen is listed on the TSCA inventory.

**OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION):**

**29 CFR 1910.119:** Process Safety Management of Highly Hazardous Chemicals: Requires facilities to develop a process safety management program based on Threshold Quantities (TQ) of highly hazardous chemicals.

Oxygen is not listed in Appendix A as a highly hazardous chemical.

**STATE REGULATIONS:**

**CALIFORNIA:** This product is not listed by California under the Safe Drinking Water Toxic Enforcement Act of 1986 (Proposition 65).

**PENNSYLVANIA:** This product is subject to the Pennsylvania Worker and Community Right-To-Know Act (35 P.S. Sections 7301-7320).

<b>16. Other Information</b>
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Be sure to read and understand all labels and instructions supplied with all containers of this product.

**WARNING:** Medical grades of Oxygen are subject to strict federal regulation, and are for use only under the control of a licensed physician or clinician, familiar with the product and its hazards.

**ADDITIONAL SAFETY AND HEALTH HAZARDS:** *High-pressure, oxydizing gas.* Clean all gauges, valves, regulators, piping, and equipment to be used in oxygen service in accordance with CGA pamphlet G-4.1. Keep cylinders and their valves free of oil and grease. Use piping and equipment adequately designed to withstand pressures to be encountered. Close cylinder valve after each use; keep closed even when empty. *Never use oxygen as a substitute for compressed air.* Never use an oxygen jet for cleaning purposes of any sort, especially for clothing. Oxygen increases the likelihood of an engulfing fire. *Prevent reverse flow.* Reverse flow into cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. *Never work on a pressurized system.* If there is a leak, close the cylinder valve. Blow the system down in a safe and environmentally sound manner in compliance with all federal, state and local laws; then repair the leak. *Never ground a compressed gas cylinder or allow it to become part of an electrical circuit.*

*Personnel who have been exposed to high concentrations of oxygen* should stay in a well-ventilated or open area before going into a confined space or near an ignition source.

**SPECIAL PRECAUTIONS:** *Use in welding and cutting.* Read and understand the manufacturer's instructions and the precautionary label on the product. See American Standard Z49.1, Safety in Welding and Cutting, published by the American Welding Society, PO Box 351040, Miami, FL 33135, and OSHA Publication 2206 (29CFR 1910), US Government Printing Office, Washington, DC 20402, for more information.

*Arcs and sparks can ignite combustible materials.* Prevent fires. Refer to NFPA 51B, "Cutting and Welding Processes." *Do not strike an arc on the cylinder.* The defect produced by an arc burn could lead to cylinder rupture.

**MIXTURES:** When you mix two or more gases or liquefied gases, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist, or other trained person when you evaluate the end product. Remember, gases and liquids have properties that can cause serious injury or death.

**HAZARD RATING SYSTEMS:**

**NFPA RATINGS:**

HEALTH = 0  
 FLAMMABILITY = 0  
 REACTIVITY = 0  
 SPECIAL = OX (Oxidizer)

**HMIS RATINGS:**

HEALTH = 0  
 FLAMMABILITY = 0  
 REACTIVITY = 0

**STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:**

**THREADED:** 0-3000 psig CGA-540  
 3001-4000 psig CGA-577  
 4001-5500 psig CGA-701

**PIN-INDEXED YOKE:** 0-3000 psig CGA-870 (Medical Use)

**ULTRA-HIGH-INTEGRITY CONNECTION:** 0-3000 psig CGA-714

Use the proper CGA connections. **DO NOT USE ADAPTERS.**

Ask your supplier about free Praxair safety literature as referenced on the label for this product; you may also obtain copies by calling 1-800-PRAXAIR. Further information about oxygen can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 1725 Jefferson Davis Highway, Arlington, VA 22202-4102, Telephone (703) 412-0900.

- AV-1 *Safe Handling and Storage of Compressed Gases*
- AV-8 *Characteristics and Safe Handling of Cryogenic Liquid and Gaseous Oxygen*
- G-4.3 *Commodity Specification for Gaseous and Liquid Oxygen*
- G-4.1 *Cleaning Equipment for Oxygen Service*
- G-4.3 *Commodity Specification for Oxygen*
- P-1 *Safe Handling of Compressed Gases in Containers*
- P-2 *Characteristics and Safe Handling of Medical Gases*
- P-14 *Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmospheres*
- SB-2 *Oxygen-Deficient Atmospheres*
- SB-8 *Use of Oxy-Fuel Gas Welding and Cutting Apparatus*
- V-1 *Compressed Gas Cylinder Valve Inlet and Outlet Connections*
- *Handbook of Compressed Gases, Third Edition*



Praxair asks users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents and contractors of the information on this MSDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

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The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair, Inc., it is the user's obligation to determine the conditions of safe use of the product.

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Praxair MSDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current Praxair MSDSs for these products, contact your Praxair sales representative or local distributor or supplier. If you have questions regarding Praxair MSDSs, would like the form number and date of the latest MSDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center ( **Phone:** 1-800-PRAXAIR; **Address:** Praxair Call Center, Praxair, Inc., PO Box 44, Tonawanda, NY 14150-7891).

Praxair is a trademark of Praxair Technology, Inc.

Praxair, Inc.  
39 Old Ridgebury Road  
Danbury CT 06810-5113



11-9-001

LCR 0438

# GARDEN GROVE



## FIRE DEPARTMENT

### HAZARDOUS MATERIALS DISCLOSURE PROGRAM

#### REPORTING FORMS PACKET: PART 2

#### BUSINESS EMERGENCY PLAN SHORT VERSION

THE FOLLOWING FORMS ARE FOR USE IN THE EVENT OF AN  
ACTUAL OR THREATENING HAZARDOUS MATERIALS EMERGENCY.

FILL THESE FORMS OUT COMPLETELY AND BE READY TO  
HAND THEM TO THE FIRE DEPARTMENT PERSONNEL WHEN  
THEY ARRIVE AT THE EMERGENCY SCENE.

IN THE EVENT OF AN EMERGENCY,

CALL 911

# GARDEN GROVE FIRE DEPARTMENT HAZARDOUS MATERIALS DISCLOSURE PROGRAM

## *BUSINESS EMERGENCY PLAN*

All businesses using, handling or storing hazardous materials that are required to disclose must complete a Business Emergency Plan. The occupancy groups listed below will be permitted to complete a short version of the business plan. The completion of the short form shall be considered the application required in the Health and Safety Code, Title 20, Chapter 6.95, Section 25503.5.

The Chief of the Garden Grove Fire Department in the role of the Administering Agency, allows the following types of businesses to file the short version of the Business Emergency Plan.

1. Gasoline/Diesel service stations. S-3 occupancies.
2. Repair Garages. H-4 occupancies.
3. Dry Cleaners
4. Businesses, at the Fire Chief's discretion, with less than 10 employees and using materials that are not considered highly or acutely toxic.

The Fire Chief exempts the following portions from the business plan. These exemptions have been established because the materials used in the above-mentioned occupancies are common knowledge to first responding units. The materials pose no significant, unexpected hazard nor do they affect the ability of the administering agency to effectively respond to their release of a hazardous material, and that there are unusual circumstances justifying this exemption.

### Exemptions

1. Detailed evacuation plans.
2. Detailed key employee responsibilities.
3. Training outline.
4. Detailed prevention outline.

The following Short Business Emergency Plan must be completed in order for the exemption to be granted.

**GARDEN GROVE FIRE DEPARTMENT  
HAZARDOUS MATERIALS DISCLOSURE PROGRAM**

*BUSINESS EMERGENCY PLAN*

Personnel Emergency Notifications and Responsibilities

Employee Evacuation and Staging Areas

1. The type of alarm signal that will be used to initiate an evacuation at the facility: (vocal, paging system, manual alarm, etc )

vocal

2. All employees shall be trained to evacuate the facility through at least one exit. Alternate exit routes shall be designated if available.
3. Staging areas shall be designated for all employees. Staging areas will be the location that all employees shall report to in the event of an emergency.

One person shall be designated to account for all personnel at the staging area. That person will be responsible for meeting the incoming Fire units and reporting the conditions known about the incident

The Staging area is at the following location as shown on your site plan map.

#11

Employee Responsibilities:

At least one employee shall be responsible for the following minimum requirements in the event of an emergency response by the Fire Department.

1. Notify employees. Initiate evacuation procedures.
2. Notify the Garden Grove Fire Department. Dial 911
3. Try to identify the nature of the incident.
4. Report to the staging area and account for evacuated employees.
5. Report to the incoming fire units.
6. Activate any emergency mitigation procedures that are available at your business. (List below any mitigation procedures specific to your business, if any.)

N/A

# GARDEN GROVE FIRE DEPARTMENT HAZARDOUS MATERIALS DISCLOSURE PROGRAM

## *BUSINESS EMERGENCY PLAN*

### Personnel Emergency Notifications and Responsibilities

#### Training Requirements

State law requires training of employees where the business uses, handles or stores hazardous materials.

Employee training provided on:

- Appointment of person/persons on site who are trained in key role positions. Emergency coordinator, evacuation coordinators, staging area supervisors and documenting officers.
- Procedures to follow during a release or threatened release of a hazardous material (evacuation to staging areas).
- Information contained in material safety data sheets.
- Warning labels/placards.
- Safe work practices.
- Use of on site emergency equipment and supplies.
- Use and location of personal protective equipment.
- Any chemical, hazardous material or substance that could be encountered in his/her work area.
- On-site alarm system for evacuation.
- Discuss possible release of hazardous materials scenario.

#### Emergency Notifications

A handler of hazardous materials is required to immediately report any release or threatened release of hazardous materials to the Garden Grove Fire Department. Failure to do so may result in criminal and/or civil prosecution.

#### Required Notifications

In the event of a release or threatened release of hazardous materials, it is state law to notify each of the following agencies:

#### Agency

#### Phone Numbers

Garden Grove Fire Department, Police,  
Paramedics

Office of Emergency Services (OES)

National Response Center

911

(800) 852-7550 OR (916) 427-4341

(800) 424-8802



# GARDEN GROVE FIRE DEPARTMENT

## BUSINESS EMERGENCY PLAN

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

1. Change of business address.
2. Change of business ownership
3. Change of business name
4. Cessation of business operation (quitting business)
5. Use or handling of a previously undisclosed hazardous material
6. A 100% increase in the quantity of a previously disclosed hazardous material

Your business is required by State law to retain a copy of this entire Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your disclosure and Emergency Business Plan will be kept.

Office Under Haz Mat  
FILE

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I CERTIFY, UNDER PENALTY OF PERJURY, THAT THE ENCLOSED INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE: 

NAME: 

TITLE: Sec. Treas.

DATE: 12-14-04

# GARDEN GROVE FIRE DEPARTMENT

## BUSINESS EMERGENCY PLAN

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

1. Change of business address.
2. Change of business ownership
3. Change of business name
4. Cessation of business operation (quitting business)
5. Use or handling of a previously undisclosed hazardous material
6. A 100% increase in the quantity of a previously disclosed hazardous material


Your business is required by State law to retain a copy of this entire Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your disclosure and Emergency Business Plan will be kept.

Office Under Haz Mat  
FILE

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I CERTIFY, UNDER PENALTY OF PERJURY, THAT THE ENCLOSED INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE: 

NAME: 

TITLE: Sec. Treas.

DATE: 12-14-04

**GARDEN GROVE FIRE DEPARTMENT  
HAZARDOUS MATERIALS DISCLOSURE PROGRAM**

*BUSINESS EMERGENCY PLAN*

Personnel Emergency Notifications and Responsibilities

Prevention

All materials are stored, used and handled within the guidelines of the Uniform Fire Code, N F P A standards, California Administrative Code, Titles 19 and 20.

This section is meant to initiate a Prevention Plan at your business and to assist in preventing a release, or threatened release, of a hazardous material. In the spaces provided, place a checkmark by the preventive actions which have been initiated by your business to abate hazards relating to hazardous material handling, use of storage.

Consideration shall include:

1. Drum storage and/or above ground tank storage areas:
  - a \_\_\_ Isolation and separation of incompatible materials
  - b \_\_\_ Diking areas to contain spills
  - c  Storage on paved ground
  
2. Compressed and/or cryogenic gas storage areas:
  - a  Cylinders stored upright and secured
  - b  Isolation and/or separation of incompatible cylinders (oxygen and flammable gases, etc.)
  
3. General:
  - a  Safe work practices are exercised in daily routines.
  - b N/A Employees who handle hazardous materials are properly trained.
  - c  Material Safety Data Sheets (MSDS) readily available for each hazardous material on the premises.
  - d  Labeling of all materials and storage areas with the product name and hazards associated with the product (drums, piping, tanks, etc.)
  - e  Uniform Fire Code (UFC) requires separation between outside hazardous material storage area or tanks and combustible materials (wood, bush, etc.)
  - f  Posting of "No Smoking" signs where appropriate.

# GARDEN GROVE FIRE DEPARTMENT

## BUSINESS EMERGENCY PLAN

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS:

1. Change of business address.
2. Change of business ownership
3. Change of business name
4. Cessation of business operation (quitting business)
5. Use or handling of a previously undisclosed hazardous material
6. A 100% increase in the quantity of a previously disclosed hazardous material

Your business is required by State law to retain a copy of this entire Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your disclosure and Emergency Business Plan will be kept.

Office Under Haz Mat  
FILE

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I CERTIFY, UNDER PENALTY OF PERJURY, THAT THE ENCLOSED INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: Sec. Treas.

DATE: 12-14-04

**GARDEN GROVE FIRE DEPARTMENT  
HAZARDOUS MATERIALS DISCLOSURE PROGRAM**

***BUSINESS EMERGENCY PLAN***

Personnel Emergency Notifications and Responsibilities

Prevention

All materials are stored, used and handled within the guidelines of the Uniform Fire Code, N F P A. standards, California Administrative Code. Titles 19 and 20.

This section is meant to initiate a Prevention Plan at your business and to assist in preventing a release, or threatened release, of a hazardous material. In the spaces provided, place a checkmark by the preventive actions which have been initiated by your business to abate hazards relating to hazardous material handling, use of storage.

Consideration shall include:

1. Drum storage and/or above ground tank storage areas:
  - a \_\_\_ Isolation and separation of incompatible materials
  - b \_\_\_ Diking areas to contain spills
  - c  Storage on paved ground
  
2. Compressed and/or cryogenic gas storage areas:
  - a  Cylinders stored upright and secured
  - b  Isolation and/or separation of incompatible cylinders (oxygen and flammable gases, etc.)
  
3. General:
  - a  Safe work practices are exercised in daily routines.
  - b N/A Employees who handle hazardous materials are properly trained.
  - c  Material Safety Data Sheets (MSDS) readily available for each hazardous material on the premises.
  - d  Labeling of all materials and storage areas with the product name and hazards associated with the product (drums, piping, tanks, etc.)
  - e  Uniform Fire Code (UFC) requires separation between outside hazardous material storage area or tanks and combustible materials (wood, bush, etc.)
  - f  Posting of "No Smoking" signs where appropriate.



# Hazardous Material Disclosure

Business Information / Chemical Inventory / Business Emergency Plan



GARDEN GROVE FIRE DEPARTMENT  
 11301 Acacia parkway  
 Garden Grove, CA 92840  
 Bus. (714) 741-5600 Fax (714) 741-5640  
 Hazardous Materials Coordinator  
 (714) 741-5636

Address: 7541 CHAPMAN AVE  
 Occupant or DBA: DAVID M TRUCK BODIES  
 Owner/Manager: [REDACTED]

Date: 6/10/08  
 File No: 438  
 Phone: 714 898 4259

California Health and Safety Code, Section 6.95, you are required to properly complete the Business Emergency Plan (BMP) packet. You are required to return the BEP packet, Hazardous Materials Disclosure Forms, and all material safety data sheets within fifteen (15) days to the Garden Grove Fire Department. HazMat Coord. (714) 741-5636

An inspection at the above location/occupancy revealed the following violation(s):

**Violation(s): CA Health and Safety Code Chapter 6.95, Article 1 and Title 19, §2729 et seq., California Code of Regulations (CCR)**

- Complete Hazardous Materials Disclosure packet, HSC Chapter 6.95, Title 19 Div 2 Chapter 3, CFC 8001.3.2
- Failure to submit a Business Emergency Plan. [HSC 25505(a)(1)]; CFC 8001.3.2
- Failure to review and/or revise the Business Emergency Plan as required [HSC 25505(b)&(c)]
- Chemical inventory is incomplete and/or requires update. [HSC 25509]
- The Emergency Response Plan is inadequate and/or does not address the following issues and shall be immediately revised and resubmitted: [HSC 25504(b)&(c)]
  - Notification Procedures
  - Mitigation Procedures
  - Evacuation Procedures
  - Employee Training
- Business Owner/Operator page is incomplete or needs to be updated. [HSC 25509]
- Failure to provide name, title, and 24-hour number of emergency contact(s). [HSC 25509(a)(7)]
- Site Map is incomplete or insufficient. [HSC 25509]
- Failure to report a release or threatened release. [HSC 25507]
- Failure to report a change in business or chemical inventory within 30 days of the following event(s): [HSC 25510]
  - 100% or more increase in the quantity of a disclosed material
  - Addition of a previously undisclosed material
  - Change in business address
  - Change in business ownership
  - Change of business name
  - Other (See comments below):

**Violation(s): California Fire Code 2001, Articles 79 & 80, Title 19 Part 9, California Code of Regulations (CCR)**

- Provide for secondary containment for hazardous materials liquids and solids (CFC 8003.1.3.3)
- Provide spill control for hazardous materials liquids (CFC 8003.1.3.2)
- Provide approved cabinet if more than 10 gallons of flammable liquids (CFC 7902.5)
- Provide placarding and signs (NFPA 704, CFC Article 79 §7901.9, Article 80 §8001.7-8)
- No Violations Found

Additional Violations and/or Notes:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Responsible Party: [REDACTED] Re-inspection Date: 6/24/08

The above are violations of California law and require immediate correction. Failure to correct violations is subject to civil penalties.

Fire Dept. Inspector: R. MACIAS ID #: \_\_\_\_\_

Condition Upon Re-inspection: \_\_\_\_\_ Date: \_\_\_\_\_





**GARDEN GROVE FIRE DEPARTMENT  
ENVIRONMENTAL PROTECTION SECTION**

11301 Acacia Parkway  
Garden Grove, CA 92840  
Business: 714 741-5600 Haz Mat: 714 741-5636

**Hazardous Materials Business Emergency Plan And  
Inventory Certification Statement**

Business Name: JEM TRUCK BODIES  
Site Address: 7541 CHAPMAN AVE

Telephone: 714 898 4259  
Zip Code: 92841

The California Health & Safety Code, Division 20, Chapter 6.95, Section 25505(c) and Section 25503.3(c) provide the following:

A business that handles hazardous materials shall review AND certify their Hazardous Materials Business Emergency Plan (HMBEP) once every three years from the date of acceptance by the Garden Grove Fire Department. A business may comply with the annual chemical inventory reporting requirement by submitting a certification statement to the Garden Grove Fire Department. **A business may not utilize this certification to meet the annual inventory submission requirements of the Emergency Planning and Community Right to Know Act (Section 11022, Title 42, United States Code).**

Note: A business may comply with the annual inventory reporting requirements using this certification statement if both of the following apply:

1. The business has previously filed an inventory reporting form and;
2. The business attests to the following:
  - The information contained in the annual inventory form most recently submitted to the Garden Grove Fire Department is complete, accurate, and up to date.
  - There has been no change in the quantity of any hazardous material as reported in the most recently submitted annual inventory form.
  - No hazardous material subject to the inventory requirements is being handled that is not listed on the most recently submitted annual inventory form.

THIS IS TO CERTIFY THAT THE HMBEP AND/OR CHEMICAL INVENTORY HAS BEEN REVIEWED.  
(Please check applicable boxes.)

- No changes are required to the HMBEP submitted to the Garden Grove Fire Department.
- All the necessary changes/revisions have been made to the HMBEP. The changes/revisions are attached to this certification.
- No changes are required to the chemical inventory that was previously on file with the Garden Grove Fire Department.
- All the necessary changes/revisions have been made to the chemical inventory. The changes/revisions are attached to this certification.

AS AN AUTHORIZED REPRESENTATIVE, I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BELIEVE THE INFORMATION IS TRUE, ACCURATE, AND COMPLETE.

Print Name [REDACTED]

Signature [REDACTED]

Job Title OWNER

Date 6/24/08

Fire Department Inspector P. MACIAS

ID # \_\_\_\_\_



**GARDEN GROVE FIRE DEPARTMENT  
ENVIRONMENTAL PROTECTION SECTION**

11301 Acacia Parkway  
Garden Grove, CA 92840  
Business: 714 741-5600 Haz Mat: 714 741-5636

**Hazardous Materials Business Emergency Plan And  
Inventory Certification Statement**

Business Name: J+M TRUCK BODIES

Telephone: 714-898-4259

Site Address: 7541 CHAPMAN #B

Zip Code: 92804

The California Health & Safety Code, Division 20, Chapter 6.95, Section 25505(c) and Section 25503.3(c) provide the following:

A business that handles hazardous materials shall review AND certify their Hazardous Materials Business Emergency Plan (HMBEP) once every three years from the date of acceptance by the Garden Grove Fire Department. A business may comply with the annual chemical inventory reporting requirement by submitting a certification statement to the Garden Grove Fire Department. **A business may not utilize this certification to meet the annual inventory submission requirements of the Emergency Planning and Community Right to Know Act (Section 11022, Title 42, United States Code).**

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AS AN AUTHORIZED REPRESENTATIVE, I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BELIEVE THE INFORMATION IS TRUE, ACCURATE, AND COMPLETE.

Print Name [Redacted]

Signature [Redacted]

Job Title Owner

Date 8-14-05



# AIRCO

## Material Safety Data Sheet

PROPANE

Page: 1  
Rev. Date  
07/12/89

Airco, Division of The BOC Group, Inc.  
575 Mountain Avenue  
Murray Hill, NJ 07974

Telephone: (201)464-8100

Emergency Contact: CHEMTREC  
Emergency Phone Number: (800)424-9300

### SECTION #1 - IDENTIFICATION

Product: PROPANE

CAS Number: 74-98-6  
Product Code: MSDS CODE G-74  
Chemical Family: Aliphatic Hydrocarbon  
Chemical Formula: C<sub>3</sub>H<sub>8</sub>

Synonyms: (LPG) DIMETHYL METHANE  
G-74  
LIQUEFIED PETROLEUM GAS

Hazard Rating - Health: 1 Slight  
- Fire: 4 Extreme  
- Reactivity: 0 Negligible

### SECTION #2 - CHEMICAL COMPONENTS

Component: PROPANE  
CAS Number: 74-98-6 Percent of Mixture: 99.0000 to 99.9800  
ACGIH TLV-TWA: D, Simple Asphyxiant OSHA PEL-TWA: 1000 ppm (Final)  
Maintain oxygen levels above 19.5% IDLH: 20,000 ppm

### SECTION #3 - PHYSICAL DATA

Boiling Point: - 43.7°F - 42.1°C  
Melting Point: - 305.86°F - 187.7°C  
Vapor Pressure: 124 psia @ 70°F  
Vapor Density (Air=1): 1.56  
Solubility (H<sub>2</sub>O): Negligible

**SECTION #3 - PHYSICAL DATA Continued...**Appearance

A colorless gas, shipped as a liquified gas under its own vapor pressure.

Odor

Odorless

**SECTION #4 - FIRE FIGHTING & EXPLOSION DATA**

Flash Point: - 156°F   - 104°C   Closed Cup  
Autoignition: 896°F   480°C

Lower Explosive Limit (%): 2.2  
Upper Explosive Limit (%): 9.5

Fire and Explosion Hazards

Propane is heavier than air and may travel a considerable distance to a source of ignition. Should flame be extinguished and flow of gas continue, increase ventilation to prevent flammable mixture formation in low areas or pockets. May burn with invisible flame in bright light. May rapidly form explosive mixtures in air.

Electrical Classification: Class 1, Group D.

Extinguishing Media

Water, Carbon dioxide, Dry chemical. Use water spray to cool fire exposed containers.

Special Fire Fighting Instructions

If possible, stop the flow of propane using a remote valve. Never enter a flammable atmosphere. Use water spray to cool surrounding containers.

**SECTION #5 - EXPOSURE and EFFECTS - INHALATION**Routes of Exposure - Inhalation

Propane is primarily a simple asphyxiant. Oxygen levels should be maintained at greater than 19.5 percent at normal atmospheric pressure which is equivalent to a partial pressure of 135 mm Hg. High concentrations of propane so as to exclude an adequate supply of oxygen to the lungs causes dizziness, deeper breathing due to air hunger, possible nausea and eventual

**SECTION #5 - EXPOSURE and EFFECTS - INGESTION**Routes of Exposure - Ingestion

Contact of mucous membranes with liquid may cause tissue freezing and cryogenic burns, although ingestion is unlikely.

First Aid - Ingestion

Treat in a manner similar to skin contact.

**SECTION #5 - MISCELLANEOUS TOXICOLOGICAL INFORMATION**

Carcinogenicity -- NTP: No

IARC: No

OSHA: No

**SECTION #6 - REACTIVITY & POLYMERIZATION**

Stability: Stable

Incompatible Materials

Oxidizers

Hazardous Decomposition Products

Carbon dioxide, Carbon monoxide if insufficient oxygen is present.

**SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES**Steps to be Taken in The Event of Spills, Leaks, or Release

Evacuate all personnel from affected areas. Use appropriate protective equipment including self contained breathing apparatus and fire turnout gear. If leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs. If leak is in container or container valve, contact CHEMTREC for emergency assistance or call your closest Airco location.

Waste Disposal Methods

Do not attempt to dispose of waste or unused quantities. Return in the shipping container PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE to Airco for proper disposal.

**SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES Continued...**

SARA Hazard Classes: Acute Health Hazard  
Fire Hazard  
Sudden Release of Pressure Hazard

**SECTION #8 - SPECIAL PROTECTIVE MEASURES**Ventilation

Use laboratory hood with forced ventilation for small quantities. Local exhaust to prevent accumulation above the exposure limit. Mechanical in accordance with electrical codes.

Eye Protection

Safety goggles or glasses.

Skin Protection

Plastic, rubber. or leather gloves for potential evaporating liquid contact.

Respiratory Protection

Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use and routine use when exposure levels are above exposure limits.

Other Protection

Safety shoes.

**SECTION #9 - SPECIAL PRECAUTIONS - STORAGE & HANDLING**Storage & Handling Conditions

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve protection outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when connecting cylinder to lower pressure (<250 psig) piping or systems. Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder. Protect cylinders from physical damage.

Store in cool, dry, well-ventilated area of non-combustible construction away from heavily trafficked areas and emergency exits. Do not allow the



**SECTION #9 - SPECIAL PRECAUTIONS - STORAGE & HANDLING Continued...**Storage & Handling Conditions

temperature where cylinders are stored to exceed 125°F. Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Use a "first in-first out" inventory system to prevent full cylinders being stored for excessive periods of time. Post "NO SMOKING OR OPEN FLAMES" signs in the storage area or use area. There should be no sources of ignition in the storage or use area.

For additional storage recommendations, consult Compressed Gas Association Pamphlets P-1, P-14, and Safety Bulletin SB-2.

Earth-ground and bond all lines and equipment associated with the propane system. All electrical equipment should be non-sparking or explosion proof.

Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipment of a compressed gas cylinder which has not been filled by the owner or with his (written) consent is a violation of Federal Law (49CFR).

Never carry a compressed gas cylinder or a container of a gas in cryogenic liquid form in an enclosed space such as a car trunk, van or station wagon. A leak can result in a fire, explosion, asphyxiation or a toxic exposure.

**SECTION #10 - SHIPPING INFORMATION**

Proper Shipping Name: Liquefied Petroleum Gas

Hazard Class: Flammable Gas

DOT Identification Number: UN1978

DOT Shipping Label: Flammable Gas

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).



Material Safety Data Sheet	Page: 1 Rev. Date 05/09/89
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ACETYLENE

Airco, Division of The BOC Group, Inc.  
575 Mountain Avenue  
Murray Hill, NJ 07974

Telephone: (908) 464-8100

Emergency Contact: CHEMTREC  
Emergency Phone Number: (800) 424-9300

**SECTION #1 - IDENTIFICATION**

Product: ACETYLENE

CAS Number: 74-86-2  
Product Code: MSDS CODE G-2  
Chemical Family: Alkyne  
Chemical Formula: C<sub>2</sub>H<sub>2</sub>

Synonyms: ETHENE  
G-2

NFPA Hazard Rating - Health: 1 Slight  
- Fire: 4 Extreme  
- Reactivity: 3 High

**SECTION #2 - CHEMICAL COMPONENTS**

Component: ACETYLENE  
CAS Number: 74-86-2                      Percent of Mixture: 100.0000  
ACGIH TLV-TWA: D, simple asphyxiant

**SECTION #3 - PHYSICAL DATA**

Boiling Point: -118.8°F    -83.8°C  
Melting Point: -113°F    -80.6°C  
Vapor Pressure: 645 psia  
Specific Gravity: 0.906  
Solubility (H<sub>2</sub>O): Soluble

Appearance

A colorless gas.

ACETYLENE

**SECTION #3 - PHYSICAL DATA Continued...**Odor

Pure acetylene has an ethereal odor. Commercial (carbide) acetylene has a distinctive garlic-like odor.

**SECTION #4 - FIRE FIGHTING & EXPLOSION DATA**

Flash Point: Gas  
Autoignition: 565°F 296°C

Lower Explosive Limit (%): 2.2  
Upper Explosive Limit (%): 80 - 85\*

Fire and Explosion Hazards

\*Pure acetylene can ignite by decomposition above 15 psi; therefore, the UEL is 100% if the ignition source is of sufficient intensity.

Electrical Classification: Class 1, Group A.

GASEOUS ACETYLENE IS SPONTANEOUSLY COMBUSTIBLE IN AIR AT PRESSURES ABOVE 15 PSI (207 kPa.). It requires a very low ignition energy so that fires which have been extinguished without stopping the flow of gas can easily reignite with possible explosive force. Acetylene has a density very similar to that of air so when leaking it does not readily dissipate.

Extinguishing Media

Carbon dioxide, dry chemical.

Special Fire Fighting Instructions

If possible, stop the flow of gas supply and allow fuel to consume itself. Use water spray to cool adjacent areas. Keep personnel away since heated or burning cylinders can rupture violently.

**SECTION #5 - EXPOSURE and EFFECTS - INHALATION**Routes of Exposure - Inhalation

Acetylene is a simple asphyxiant. Oxygen levels should be maintained at greater than 18 molar percent at normal atmospheric pressure which is equivalent to a partial pressure of 135 mm Hg. High concentrations of acetylene so as to exclude an adequate supply of oxygen to the lungs causes dizziness, deeper breathing due to air hunger, possible nausea and eventual unconsciousness.

ACETYLENE

**SECTION #5 - EXPOSURE and EFFECTS - INHALATION Continued...**Routes of Exposure - Inhalation

Acetylene is relatively inactive biologically and essentially nontoxic; therefore, the major hazard is the exclusion of an adequate supply of oxygen to the lungs. Low concentrations (10-20% in air) cause symptoms similar to that of being intoxicated. As a narcotic gas or intoxicant, it causes hypercapnia (an excessive amount of carbon dioxide in the blood). Repeated exposures to tolerable levels has not shown deleterious effects.

Exposure to the acetone component is unlikely unless cylinder is leaking on its side. Acetone is primarily a central nervous system toxin causing headache, nausea, dizziness, vomiting and fatigue.

First Aid - Inhalation

PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE. PERSONNEL SHOULD BE EQUIPPED WITH 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. Keep victim warm and quiet.

**SECTION #5 - EXPOSURE and EFFECTS - SKIN**Routes of Exposure - Skin

Skin effects are not likely. Contact with liquid acetone may cause irritation and dermatitis upon repeated exposures.

First Aid - Skin

Wash affected areas with soap and warm water. If irritation persists, seek medical attention.

**SECTION #5 - MISCELLANEOUS TOXICOLOGICAL INFORMATION**

Carcinogenicity: NTP: No

IARC: No

OSHA: No

ACETYLENE

**SECTION #6 - REACTIVITY & POLYMERIZATION**

Stability: Unstable

Conditions to Avoid (Stability)

Do not allow free gas (outside of cylinder) to exceed 15 psi. Do not expose cylinders to sudden shock or heat.

Incompatible Materials

Oxygen and other oxidizers including all halogens and halogen compounds. Forms explosive acetylide compounds with copper, mercury, silver, brasses containing >66% copper and brazing materials containing silver or copper.

Hazardous Decomposition Products

Carbon monoxide and hydrogen.

Hazardous Polymerization: Will not occur.

**SECTION #7 - SPILL, LEAK, & DISPOSAL PROCEDURES**Steps to be Taken in The Event of Spills, Leaks, or Release

Evacuate all personnel from affected areas. Use appropriate protective equipment. If leak is in user's equipment, be certain to purge piping with an inert gas prior to attempting repairs. If leak is in container or container valve, contact CHEMTREC for emergency assistance or call your closest Airco location.

Waste Disposal Methods

Do not attempt to dispose of waste or unused quantities. Return in the shipping container PROPERLY LABELED, WITH ANY VALVE OUTLET PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE to Airco for proper disposal.

SARA Hazard Classes: Acute Health Hazard  
Fire Hazard  
Sudden Release of Pressure Hazard

ACETYLENE

**SECTION #8 - SPECIAL PROTECTIVE MEASURES**Ventilation

Hood with forced ventilation. Local exhaust to prevent accumulation above the exposure limit. Mechanical in accordance with electrical codes.

Eye Protection

Safety goggles or glasses.

Skin Protection

PVC or rubber in laboratory; as required for cutting and welding.

Respiratory Protection

Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use.

Other Protection

Safety shoes, safety shower.

**SECTION #9 - SPECIAL PRECAUTIONS - STORAGE & HANDLING**Storage & Handling Conditions

Use only in well-ventilated areas. Valve protection caps must remain in place unless container is secured with valve protection outlet piped to use point. Do not drag, slide or roll cylinders. Use a suitable hand truck for cylinder movement. Use a pressure reducing regulator when removing gas from the cylinder. DO NOT ALLOW THE FREE GAS TO EXCEED 15 PSI (207 kPa) @ 70°F (21.1°C). Do not heat cylinder by any means to increase the discharge rate of product from the cylinder. Use a check valve or trap in the discharge line to prevent hazardous back flow into the cylinder.

Protect cylinders from physical damage. Store in cool, dry, well-ventilated area of non-combustible construction away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 130°F. Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Use a "first in-first out" inventory system to prevent full cylinders being stored for excessive periods of time. Post "NO SMOKING OR OPEN FLAMES" signs in the storage area or use area. There should be no sources of ignition in the storage or use area.

**SECTION #10 - SHIPPING INFORMATION**

Proper Shipping Name: Acetylene

ACETYLENE

**SECTION #10 - SHIPPING INFORMATION Continued...**

Hazard Class: Flammable Gas  
DOT Identification Number: UN1001  
DOT Shipping Label: Flammable Gas

**SECTION #11 - MISC COMMENTS & REFERENCE DOCUMENTATION**

Earth-ground and bond all lines and equipment associated with the acetylene system. Electrical equipment should be non sparking or explosion-proof.

Compressed gas cylinders should not be refilled except by qualified producers of compressed gases. Shipments of a compressed gas cylinder, which has not been filled by the owner or with his (written) consent, is a violation of Federal Law (49CFR).

For additional recommendations, consult Compressed Gas Association Pamphlets P-1, G-1. NFPA #51-1984. OSHA 1910-subpart H & Q.

Since acetylene will explode or combust if its pressure exceeds 15 psi (207 kPa), it is shipped dissolved in acetone or dimethylformamide, which is dispersed in a porous mass within the cylinder. Follow AIRCO's instructions for the maximum withdrawal rate for each size cylinder so that the solvent is not withdrawn with the acetylene.

Most metals except silver, copper, mercury, or brasses with more than 66% copper are compatible (noncorrosive) with acetylene.

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).