

AIRCO INDUSTRIAL GASES -- PROPANE -- 3439-00-542-0531

=====  
Product Identification  
=====

Product ID:PROPANE  
MSDS Date:08/17/1993  
FSC:3439  
NIIN:00-542-0531  
MSDS Number: CGLSD  
=== Responsible Party ===  
Company Name:AIRCO INDUSTRIAL GASES  
Address:575 MOUNTAIN AVE  
City:MURRAY HILL  
State:NJ  
ZIP:07974-2006  
Country:US  
Info Phone Num:908-464-8100  
Emergency Phone Num:800-424-9300 (CHEMTREC)  
CAGE:6J576

===

Contractor Identification ===  
Company Name:BOC GROUP INC THE, BOC GASES DIV  
Address:575 MOUNTAIN AVE  
Box:City:NEW PROVIDENCE  
State:NJ  
ZIP:07974-1209  
Country:US  
Phone:908-464-8100  
CAGE:6J576  
Company Name:MAGNA INDUSTRIES INC  
Address:2201 WEST 110TH STREET  
Box:City:CLEVELAND  
State:OH  
ZIP:44102  
Country:US  
Phone:216-251-3334 OR 800-969-3334  
CAGE:0AJN5

=====  
Composition/Information on Ingredients  
=====

Ingred Name:PROPANE  
CAS:74-98-6  
RTECS #:TX2275000  
Fraction by Wt: 99.98%  
Othe

r REC Limits:NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:ASPHYXIAN; 9596

===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:CONTACT WITH SKIN OR EYES MAY CAUSE FROSTBITE AND/OR CRYGENIC "BURNS". INGESTION MAY CAUSE TISSUE FREEZING & CRYOGENIC "BURNS". INHALATION MAY CAUSE ASPHYXIA

IF OXYGEN LEVELS FALL BELOW 19.5%. CHRONIC: NONE SPECIFIED BY MANUFACTURER.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA.

Effects of Overexposure:SKIN-FROSTBITE, CRYGENIC BURNS. EYES-TISSUE FREEZING, CRYGENIC BURNS, PAIN, IRRITATION. INGESTED-TISSUE FREEZING & CRYGENIC BURNS. INHALED-DIZZINESS, DEEPER BREATHING, NAUSEA, UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

===== First Aid Measures =====

First Aid:EYES-IMMEDIATELY FLUSH WITH LOTS OF WATER. SEEK MEDICAL ATTENTION. DO NOT USE HOT WATER! SKIN-FLUSH WITH LUKEWARM WATER. SEE PHYSICIAN IMMEDIATELY! INGESTED-TREAT AS SKIN EXPOSURE. INHALED-REMOVE TO UNCONTAMINATED AREA. GIVE ARTIFICIAL RESPIRATION OR OXYGEN AS REQUIRED. GET PROMPT MEDICAL TREATMENT.

===== Fire Fighting Measures =====

Flash

Point Method:CC

Flash Point:-155F,-104C

Autoignition Temp:Autoignition Temp Text:896F

Lower Limits:2.2

Upper Limits:9.5

Extinguishing Media:WATER, CARBON DIOXIDE, DRY CHEMICAL. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Fire Fighting Procedures:IF POSSIBLE, STOP THE FLOW OF PROPANE USING A REMOTE VALVE. NEVER ENTER A FLAMMABLE ATMOSPHERE. USE WATER SPRAY TO COOL SURROUNDING CONTAINERS.

Unusual Fire/Explosion Hazard:PROPANE IS HEAVIER THAN AIR & MAY TRAVEL CONSIDERABLE DIST

ANCE TO A SOURCE OF IGNITION. MAY RAPIDLY FORM  
EXPLOSIVE MIXTURES IN AIR.

===== Accidental Release Measures =====

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM AFFECTED AREAS.  
USE APPROPRIATE PROTECTIVE EQUIPMENT INCLUDING SCBA & FULL TURNOUT  
GEAR. IF LEAK IN FACILITY EQUIPMENT, PURGE PIPING WITH INERT GAS  
PRIOR TO REPAIRING. IF LEAK IN CONTAINER, CALL CHEMTREC OR AIRCO  
DEALER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:USE ONLY IN WELL-VNTILATED AREAS.  
VALVE PROTECTION CAPS MUST REMAIN IN PLACE UNLESS IN USE. DO NOT  
ROLL, DRAG, SLIDE CYLINDERS.  
Other Precautions:USE A SUITABLE HAND-TRUCK FOR CYLINDER MOVEMENT. DO  
NOT HEAT CYLINDER AS A MEANS TO INCREASE DISCHARGE RATE. PROTECT  
CYLINDERS FROM PHYSICAL DAMAGE.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:POS  
TITIVE 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.

Ventilation:USE LABORATORY HOOD WITH FORCED VENTILATION FOR SMALL  
QUANTITIES. LOCAL EXHAUST TO PREVENT ACCUMULATION ABOVE PEL/TLV.

Protective Gloves:PLASTIC, RUBBER OR LEATHER GLOVES.

Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES.

Other Protective Equipment:SAFETY SHOES.

Work Hygienic Practices:WASH  
THOROUGHLY AFTER HANDLING AND BEFORE  
EATING, DRINKING OR SMOKING. LAUNDRER CONTAMINATED CLOTHING BEFORE  
REUSE.

Supplemental Safety and Health  
SP0490-96-MQD58.

===== Physical/Chemical Properties =====

HCC:G2

Boiling Pt:B.P. Text:-44F,-42C

Melt/Freeze Pt:M.P/F.P Text:-306F,-188C

Vapor Pres:124 PSIA

Vapor Density:1.56

Solubility in Water:NEGLIGIBLE

Appearance and Odor:A COLORLESS GAS, SHIPPED AS A LIQUIFIED GAS UNDER  
ITS OWN VAPOR PRESSUREE.

=====

== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS.

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: CARBON MONOXIDE IF INSUFFICIENT OXYGEN IS PRESENT; CARBON DIOXIDE.

===== Disposal Considerations =====

Waste Disposal Methods: DO NOT ATTEMPT TO DISPOSE OF WASTE OR UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINER PROPERLY LABELED WITH

OUTLET VALVE PLUGS OR CAPS SECURED AND VALVE PROTECTION CAP IN PLACE, TO AIRCO FOR PROPER DISPOSAL.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.