

Material Safety Data Sheet

Mixed Gas

SECTION 01

Chemical Product and Company Identification

Product Name	:	Mixed Gas
Supplier	:	EsPRI Gas 500 Northridge Road Suite 200 Atlanta, GA 30350
Product Use	:	Use of the substance/mixture Industrial use Food applications
Synonym	:	Non-oxidizing mixtures of argon, carbon dioxide, nitrogen, and/or oxygen
MSDS #	:	003017
Date of Prep/ Revision	:	9/30/2014
In Case of Emergency	:	1-866-734-3438

SECTION 02

Hazards Identification

Physical State	:	Gas [Compressed gas]
Emergency Overview	:	H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION. MAY SUPPORT COMBUSTION. MAY INCREASE RESPIRATION AND HEART RATE. Do not handle until all safety precautions have been read and understood. Avoid breathing gas. Do not get in eyes, on skin, or on clothing. Use and store only outdoors or in a well-ventilated place. Use a back flow preventive device in the piping. Use only with equipment rated for cylinder pressure. Close valve after each use and when empty. Protect from sunlight when ambient temperature exceeds 52°C (125°F).

SECTION 02

Hazards Identification (Cont.)

Emergency Overview : Use and store only outdoors or in a well-ventilated place.
Use a back flow preventive device in the piping.
Use only with equipment rated for cylinder pressure.
Close valve after each use and when empty.
Protect from sunlight when ambient temperature exceeds 52°C (125°F).

Routes of Entry : Inhalation, Skin, Eye, Ingestion

Potential Acute Health Effects

Eye : Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Get immediate medical attention.

Skin : Wash with plenty of soap and water. For exposure, immediately warm frostbite area with warm water not to exceed 105°F (41°C). Water temperature should be tolerable to normal skin. Maintain skin warming for at least 15 minutes or until normal coloring and sensation have returned to the affected area. In case of massive exposure, remove clothing while showering with warm water. Seek medical evaluation and treatment as soon as possible

Inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Ingestion : Ingestion is not considered a potential route of exposure.

SECTION 03

Composition, Information on Ingredients

Name : Oxygen

CAS Number : 7782-44-7

% Volume : 0 - 23.5

Exposure Limits : N/A

SECTION 03

Composition, Information on Ingredients (Cont.)

Name : Nitrogen
CAS Number : 7727-37-9
% Volume : 0 - 95
Exposure Limits : N/A

Name : Argon
CAS Number : 7440-37-1
% Volume : 0 - 95
Exposure Limits : N/A

Name : Carbon dioxide
CAS Number : 124-38-9
% Volume : 0 - 95
Exposure Limits : N/A

SECTION 04

First Aid Measures

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Eyes : Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Get immediate medical attention.

SECTION 04

First Aid Measures (Cont.)

- Skin** : Wash with plenty of soap and water. For exposure, immediately warm frostbite area with warm water not to exceed 105°F (41°C). Water temperature should be tolerable to normal skin. Maintain skin warming for at least 15 minutes or until normal coloring and sensation have returned to the affected area. In case of massive exposure, remove clothing while showering with warm water. Seek medical evaluation and treatment as soon as possible.
- Inhalation** : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.
- Ingestion** : Ingestion is not considered a potential route of exposure

SECTION 05

Fire-Fighting Measures

- Flammability of the Product** : Non-Flammable
- Products of combustion** : No specific data
- Fire-fighting media and instructions** : Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems. Stop flow of product if safe to do so. Use water spray or fog to knock down fire fumes if possible.
- Special protective equipment for fire-fighters** : Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

SECTION 06

Accidental Release Measures

- Personal Precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). Eliminate all ignition sources if safe to do so. Do not touch or walk through spilled material. Shut off gas supply if this can be done safely. Isolate area until gas has dispersed
- Environmental Precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for Cleaning Up** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 07

Handling and Storage

- Handling** : Wear leather safety gloves and safety shoes when handling cylinders. Protect cylinders from physical damage; do not drag, roll, slide or drop. While moving cylinder, always keep in place removable valve cover. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. 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. Slowly open the valve. If the valve is hard to open, discontinue use and contact your supplier. Close the container valve after each use; keep closed even when empty. Never apply flame or localized heat directly to any part of the container. High temperatures may damage the container and could cause the pressure relief device to fail prematurely, venting the container contents. For other precautions in using this product, see section 16.
- Storage** : Store in a cool, well-ventilated place. Store and use with adequate ventilation. Store only where temperature will not exceed 125°F (52°C). Firmly secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, firmly in place by hand. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods.

SECTION 08

Exposure Controls / Personal Protection

Engineering Controls : Oxygen detectors should be used when asphyxiating gases may be released. Systems under pressure should be regularly checked for leakages. Provide adequate general and local exhaust ventilation. Consider work permit system e.g. for maintenance activities.

Personal Protection

Eyes : Wear safety glasses with side shields.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory : When workplace conditions warrant respirator use, follow a respiratory protection program that meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Hands : Wear working gloves when handling gas containers.

Product Name : Mixed Gas

Other information : Wear safety shoes while handling containers.

Consult local authorities for acceptable exposure limits.

SECTION 09

Physical and Chemical Properties

Physical State : Gas

Appearance : Colorless Gas

Color : Colorless

Gas Density : 1 - 1.5

SECTION 09

Physical and Chemical Properties (Cont.)

Solubility : Water

Oxidizing Properties : None

SECTION 10

Stability and Reactivity

Stability and Reactivity : No reactivity hazard.

SECTION 11

Toxicological Information

Toxicity Data

Other Toxic Effects on Humans : No specific information is available in our database regarding the other toxic effects of this material to humans

Specific Effects

Carcinogenic Effects : No known significant effects or critical hazards.

Mutagenic Effects : No known significant effects or critical hazards.

Reproduction Toxicity : No known significant effects or critical hazards.

SECTION 12

Ecological Information

Bioaccumulative : Carbon Dioxide 0.83

Environmental Fate : Not Available

SECTION 12

Ecological Information

Environmental Hazards : This product shows a low bioaccumulation potential.

Toxicity to the Environment : Not Available

SECTION 13




Disposal Considerations

Waste Treatment Methods : May be vented to atmosphere in a well ventilated place. Consult supplier for specific recommendations. Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required.

Waste Disposal Recommend : Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

SECTION 14

Transport Information

Regulatory Info	UN #	Proper Shipping Name	Class	Packing Group	Label	Additional Info
DOT Classification	UN1956	: COMPRESSED GAS, N.O.S	2.2	Non-flammable compressed gas		
Transport By Sea	UN1956	: COMPRESSED GAS, N.O.S	IMDG 2	Gases		
Air Transport	UN1956	: COMPRESSED GAS, N.O.S	IATA 2	N/A (gas)		-

“REFER TO CFR 49 (OR AUTHORITY HAVING JURISDICTION) TO DETERMINE THE INFORMATION REQUIRED FOR SHIPMENT OF THE PRODUCT.”

SECTION 15

Regulatory Information

United States

U.S. Federal Regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** This material is listed or exempted.
United States inventory (TSCA 8b): This material is listed or exempted.
State regulations SARA 302/304: No products were found.
SARA 311/312 Hazards identification: Immediate (acute) health hazard
Sudden release of pressure hazard, Fire hazard.

State Regulations : **Connecticut Carcinogen Reporting:** This material is not listed.
Connecticut Hazardous Material Survey: This material is not listed.
Florida substances: This material is not listed.
Illinois Chemical Safety Act: This material is not listed.
Illinois Toxic Substances Disclosure to Employee Act: This material is not listed.
Louisiana Reporting: This material is not listed.
Louisiana Spill: This material is not listed.
Massachusetts Spill: This material is not listed.
Massachusetts Substances: This material is not listed.
Michigan Critical Material: This material is not listed.
Minnesota Hazardous Substances: This material is not listed.
New Jersey Hazardous Substances: This material is not listed.
New Jersey Spill: This material is not listed.
New Jersey Toxic Catastrophe Prevention Act: This material is not listed.
New York Acutely Hazardous Substances: This material is not listed.
New York Toxic Chemical Release Reporting: This material is not listed.
Pennsylvania RTK Hazardous Substances: This material is not listed.
Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada) : **Class A:** Compressed gas.
Class C: Oxidizing material.
CEPA Toxic substances: This material is not listed.
Canadian ARET: This material is not listed.
Canadian NPRI: This material is not listed.
Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances:

SECTION 16

Other Information

United States

Label Requirements : GAS: OXIDIZER.
 CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE.
 CONTENTS UNDER PRESSURE.
 Do not puncture or incinerate container.
 May cause severe frostbite.
 LIQUID: OXIDIZER.
 CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE.
 Extremely cold liquid and gas under pressure.
 May cause severe frostbite.

Canada

Label Requirements : Class A: Compressed gas.
 Class C: Oxidizing material.

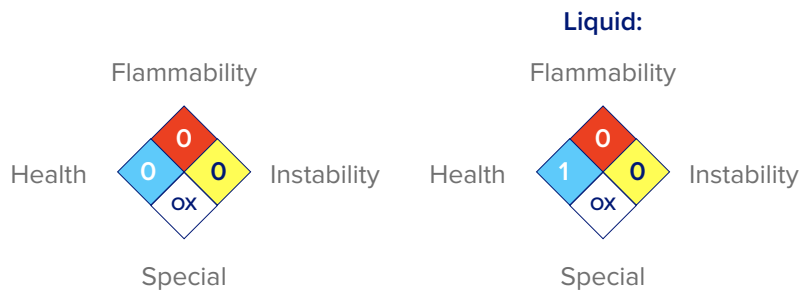
Hazardous Material Information System (U.S.A.)

Health	0
Flammability	0
Physical Hazards	0

Liquid:

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	

National Fire Protection Association (U.S.A.)



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.