CONDEN GROUND

HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

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OEPARTING ADD	DELETE REVISED 1		Page	2 of 2
FACILITY ID# 3 0 0 3	38 BUSI	NESS NAME LA TA	esting.	3
	i. FACIL	ITY INFORMATION		4
CHEMICAL LOCATION	B-	1, E-1, (5-9	·
CONFIDENTIAL LOCATION EPCRA	Yes No 5 MAP	# /	6 GRID# B-/,	E-1.65 1
	II. CHEM	ICAL INFORMATION		
CHEMICAL NAME	10 Kliths GEN	WASTE	Yes 8 TRADE SECRET • If EPCRA see instr	Yes No 11
COMMON NAME	1 . ,		9 An EHS Chemical	Yes No 12
	1 4 UIP NITTO 92	plied by GGFD)	*If EHS is "Yes", all amo	unts must be LBS 13
CAS# 7727 - 3	7/9		□ Var □ No. 15 CURIES	16
TYPE (Check one item only).				RESSURE RELEASE 18
PHYSICAL STATE a. SC (Check one item only)	DLID 🔑 K. LIQUID 🔼 c. GAS	I7 FED HAZARD a. FIF CATEGORIES d. AC		HRONIC HEALTH
AVERAGE DAILY GOOD	19 MAXIMUM DAILY /5200	20 ANNUAL WASTE AMOUNT	21 STATE WASTE	CODE 22
UNITS a. GALLONS c. POUNDS	b. CUBIC FEET 23 DAYS ON SITE d. TONS	365	24 LARGEST CONTAINER	25
(Check all that apply) b. b. c.	ABOVEGROUND TANK UNDERGROUND TANK TANK INSIDE BLDG STEEL DRUM De. PLASTIC DRUM G. NONMETALLIC METAL CONTA	DRUM I. FIBER DRUM	n. GLASS CONTAINER o PLASTIC CONTAINER] q. TANK WAGON 26] r. RAIL CAR] s. TOTE BIN] t. OTHER
STORAGE PRESSURE	PA .	OVE AMBIENT C	BELOW AMBIENT	27
STORAGE TEMPERATURE	a. AMBIENT b. AE	OVE AMBIENT	BELOW AMBIENT d. CF	RYOGENIC 28
%WT I	HAZARDOUS COMPONENT (For m	ixture or waste only)	EHS	CAS#
1 29		30	☐ Yes ☐ No 31	32
2 29		30	☐ Yes ☐ No 31	32
3 29		30	☐ Yes ☐ No 31	32
4 29		30	☐ Yes ☐ No 31	32
5 29		30	☐ Yes ☐ No 31	32
If more hazardous components are pres	sent at greater than 1% by weight if non-carcinogenic,	or 0.1% by weight if carcinogenic, atte DING INFORMATION	ach additional sheets of paper capturing t	ne required information.
	7 7		NFPA 704 HAZARD D	IAMOND T
UNDOT#	for to phinning papers or MSDS	33	FIRE (RED)	
DOT HAZARD CLASS _	er to shipping papers or MSDS Now Frammh/a Refer to shipping papers or MSD	5 (44) 34		REACTIVE (YELLOW) WHITE OX/W. 37
EPCRA YES	•	35	INDIO -1 V	0.0.1
x		MA	KE AS MANY COPIES OF	
	EPCRA. Please Sign Here	36	INVENTORY FORM AS N	IEEDED

Material Safety Data Sheet



Nitrogen

Section 1. Chemical product and company identification

Product name

: Nitrogen

Supplier

AIRGAS INC., on behalf of its subsidiaries

259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

Product use

: Synthetic/Analytical chemistry. Liquid - cryogenic coolant.

Synonym

nitrogen (dot); nitrogen gas; Nitrogen NF, LIN, Cryogenic Liquid Nitrogen, Liquid

Nitrogen 001040

MSDS# Date of

1/14/2011.

Preparation/Revision

: 1-866-734-3438

In case of emergency

Section 2. Hazards identification

Physical state

: Gas. [NORMALLY A COLORLESS GAS: MAY BE A CLEAR COLORLESS LIQUID AT LOW TEMPERATURES. SOLD AS A COMPRESSED GAS OR LIQUID IN STEEL

CYLINDERS.]

Emergency overview

: WARNING!

GAS:

CONTENTS UNDER PRESURE. Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely cold liquid and gas under pressure.

Can cause rapid suffocation. May cause severe frostbite.

Do not puncture or incinerate container.

Contact with rapidly expanding gases or liquids can cause frostbite.

Routes of entry

: Inhalation

Potential acute health effects

Eyes

Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic liquid can cause frostbite and cryogenic burns.

Skin

: Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic liquid can cause frostbite and cryogenic burns.

: Acts as a simple asphyxiant. Inhalation

Ingestion

: Ingestion is not a normal route of exposure for gases. Contact with cryogenic liquid can

cause frostbite and cryogenic burns.

Medical conditions aggravated by overexposure

: Acute or chronic respiratory conditions may be aggravated by overexposure to this gas.

See toxicological information (Section 11)

Section 3. Composition, Information on Ingredients

Name Nitrogen CAS number 7727-37-9

% Volume 100

Exposure limits

Oxygen Depletion [Asphyxiant]

Section 4. 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.

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact

: None expected.

Frostbite

: Try to warm up the frozen tissues and seek medical attention.

Inhalation

: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion

: As this product is a gas, refer to the inhalation section.

Section 5. Fire-fighting measures

Flammability of the product

: Non-flammable.

Products of combustion

: Decomposition products may include the following materials: nitrogen oxides

Fire-fighting media and instructions

: Use an extinguishing agent suitable for the surrounding fire.

Apply water from a safe distance to cool container and protect surrounding area. If involved in fire, shut off flow immediately if it can be done without risk.

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions

: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). 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. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Handling

: High pressure gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Never allow any unprotected part of the body to touch uninsulated pipes or vessels that contain cryogenic liquids. Prevent entrapment of liquid in closed systems or piping without pressure relief devices. Some materials may become brittle at low temperatures and will easily fracture.

Storage

: Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

For additional information concerning storage and handling refer to Compressed Gas Association pamphlets P-1 Safe Handling of Compressed Gases in Containers and P-12 Safe Handling of Cryogenic Liquids available from the Compressed Gas Association, Inc.

Section 8. Exposure controls/personal protection

Engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

When working with cryogenic liquids, wear a full face shield.

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

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

The applicable standards are (US) 29 CFR 1910.134 and (Canada) Z94.4-93

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Insulated gloves suitable for low temperatures

Personal protection in case

of a large spill

: Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the

product.

Product name

Nitrogen

Oxygen Depletion [Asphyxiant]

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Molecular weight : 28.02 g/mole

Molecular formula : N2

Boiling/condensation point : -195.8°C (-320.4°F)

Melting/freezing point : -210°C (-346°F)

Critical temperature : -146.9°C (-232.4°F)

Vapor density : 0.967 (Air = 1) Liquid Density@BP: 50.46 lb/ft3 (808.3 kg/m3)

Specific Volume (ft ³/lb) : 13.8889 Gas Density (lb/ft ³) : 0.072

Section 10. Stability and reactivity

Stability and reactivity

: The product is stable.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Hazardous polymerization

: Under normal conditions of storage and use, hazardous polymerization will not occur.

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.

Page: 3/6

Nitrogen

Section 12. Ecological information

Aquatic ecotoxicity

Not available.

Environmental fate

: Not available.

Environmental hazards

: No known significant effects or critical hazards.

Toxicity to the environment : Not available.

Section 13. Disposal considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation.Return cylinders with residual product to Airgas, Inc.Do not dispose of locally.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1066	NITROGEN, COMPRESSED	2.2	Not applicable (gas).	Taxa state Lab	<u>Limited</u> <u>quantity</u> Yes.
	UN1977	Nitrogen, refrigerated liquid				Packaging instruction Passenger aircraft Quantity limitation: 75 kg
						Cargo aircraft Quantity limitation: 150 kg
TDG Classification	UN1066 UN1977	NITROGEN, COMPRESSED Nitrogen, refrigerated liquid	2.2	Not applicable (gas).		Explosive Limit and Limited Quantity Index 0.125
						Passenger Carrying Road or Rail Index 75
Mexico Classification	UN1066	NITROGEN, COMPRESSED	2.2	Not applicable (gas).	Non-comment day	-
	UN1977	Nitrogen, refrigerated liquid				

[&]quot;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) IUR: Partial exemption

United States inventory (TSCA 8b): This material is listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Nitrogen

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

Nitrogen: Sudden release of pressure

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 listed.
Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substances: This material is not listed. New Jersey Hazardous Substances: This material is 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 listed. Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada)

: Class A: Compressed gas.

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: This material is not listed.

Section 16. Other information

United States

Label requirements

: GAS:

CONTENTS UNDER PRESURE.

Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely cold liquid and gas under pressure.

Can cause rapid suffocation. May cause severe frostbite.

Canada

Label requirements

: Class A: Compressed gas.

Build 1.1 Page: 5/6

Material Safety Data Sheet



Argon

Section 1. Chemical product and company identification

Product name

: Argon

Supplier

AIRGAS INC., on behalf of its subsidiaries

259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

Product use

: Synthetic/Analytical chemistry.

Synonym

argon, compressed; Cryogenic Liquid Argon, Liquid Argon

MSDS#

001004

Date of

: 8/27/2010.

Preparation/Revision In case of emergency

: 1-866-734-3438

Section 2. Hazards identification

Physical state

: Gas. [COLORLESS, ODORLESS INERT GAS OR LIQUID]

Emergency overview

: WARNING!

GAS:

CONTENTS UNDER PRESURE.

Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely cold liquid and gas under pressure.

Can cause rapid suffocation. May cause severe frostbite.

Do not puncture or incinerate container.

Contact with rapidly expanding gases or liquids can cause frostbite.

Routes of entry

: Inhalation

Potential acute health effects

Eyes

: Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic

liquid can cause frostbite and cryogenic burns.

Skin

: Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic

liquid can cause frostbite and cryogenic burns.

Inhalation

Acts as a simple asphyxiant.

Ingestion

: Ingestion is not a normal route of exposure for gases. Contact with cryogenic liquid can

cause frostbite and cryogenic burns.

Potential chronic health

effects

: CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by overexposure

: Acute or chronic respiratory conditions may be aggravated by overexposure to this gas.

See toxicological information (section 11)

Argon

Section 3. Composition, Information on Ingredients

Name CAS number % Volume Exposure limits

Argon 7440-37-1 100 Oxygen Depletion [Asphyxiant]

Section 4. 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.

Eye contact : Check for at le

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical

attention immediately.

Skin contact : None expected.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Inhalation: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

respiratory arrest occurs, provide artificial respiration or oxygen by trained personne Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

Ingestion: As this product is a gas, refer to the inhalation section.

Section 5. Fire-fighting measures

Flammability of the product

laminability of the product

Products of combustion

Fire-fighting media and instructions

: Non-flammable.

: No specific data.

: Use an extinguishing agent suitable for the surrounding fire.

Apply water from a safe distance to cool container and protect surrounding area. If involved in fire, shut off flow immediately if it can be done without risk.

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and

the container may burst or explode.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions

: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). 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

Methods for cleaning up

: Immediately contact emergency personnel. Stop leak if without risk. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Handling

: High pressure gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Never allow any unprotected part of the body to touch uninsulated pipes or vessels that contain cryogenic liquids. Prevent entrapment of liquid in closed systems or piping without pressure relief devices. Some materials may become brittle at low temperatures and will easily fracture.

Build 1.1 Page: 2/6

Argon

Storage

: Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

For additional information concerning storage and handling refer to Compressed Gas Association pamphlets P-1 Safe Handling of Compressed Gases in Containers and P-12 Safe Handling of Cryogenic Liquids available from the Compressed Gas Association, Inc.

Section 8. Exposure controls/personal protection

Engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

When working with cryogenic liquids, wear a full face shield.

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

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

The applicable standards are (US) 29 CFR 1910.134 and (Canada) Z94.4-93

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Insulated gloves suitable for low temperatures

Personal protection in case

of a large spill

: Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product.

Product name

argon

Oxygen Depletion [Asphyxiant]

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Molecular weight : 39.95 g/mole

Molecular formula : Ar

Boiling/condensation point : -185.7°C (-302.3°F) **Melting/freezing point** : -189.2°C (-308.6°F) **Critical temperature** : -122.4°C (-188.3°F)

Vapor density : 1.38 (Air = 1). Liquid Density@BP: 87 lb/ft3 (1393 kg/m3)

Specific Volume (ft ³/lb) : 9.70874 Gas Density (lb/ft ³) : 0.103

Section 10. Stability and reactivity

Stability and reactivity

: The product is stable.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization

: Under normal conditions of storage and use, hazardous polymerization will not occur.

Build 1.1 Page: 3/6

Argon

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

Aquatic ecotoxicity

Not available.

Environmental fate

: Not available.

Environmental hazards

: No known significant effects or critical hazards.

Toxicity to the environment

: Not available.

Section 13. Disposal considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation.Return cylinders with residual product to Airgas, Inc.Do not dispose of locally.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1006	ARGON, COMPRESSED	2.2	Not applicable (gas).		<u>Limited</u> <u>quantity</u> Yes.
	UN1951	Argon, refrigerated liquid				Packaging instruction Passenger aircraft Quantity limitation: 75 kg Cargo aircraft
						Quantity limitation: 150 kg
TDG Classification	UN1006 UN1951	ARGON, COMPRESSED Argon, refrigerated liquid	2.2	Not applicable (gas).		Explosive Limit and Limited Quantity Index 0.125
						Passenger Carrying Road or Rail Index 75
				,		Special provisions 42

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Argon								
Mexico Classification UN1006	ARGON, COMPRESSED Argon, refrigerated	2.2	Not applicable (gas).		-			

[&]quot;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) IUR: argon

United States inventory (TSCA 8b): This material is listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: argon

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

argon: Sudden release of pressure

Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

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 listed.
Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substances: This material is not listed. New Jersey Hazardous Substances: This material is 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 listed.
Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada)

: Class A: Compressed gas.

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: This material is not listed.

Section 16. Other information

United States

Label requirements

: GAS:

CONTENTS UNDER PRESURE.

Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely cold liquid and gas under pressure.

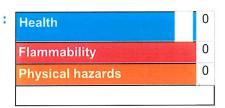
Can cause rapid suffocation. May cause severe frostbite.

Canada

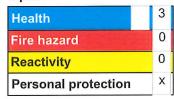
Label requirements

: Class A: Compressed gas.

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



liquid:



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



liquid:



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.

Material Safety Data Sheet



Acetylene

Section 1. Chemical product and company identification

Product name : Acetylene

Supplier : AIRGAS INC., on behalf of its subsidiaries

259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

Product use : Synthetic/Analytical chemistry.

Synonym : acetylen; acetylene; ethine; ethyne; narcylen

MSDS # : 001001 Date of : 2/3/2011.

Preparation/Revision

<u>In case of emergency</u> : 1-866-734-3438

Section 2. Hazards identification

Physical state : Gas.

Emergency overview : WARNING!

FLAMMABLE GAS.

MAY CAUSE FLASH FIRE.

MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

CONTENTS UNDER PRESSURE.

Keep away from heat, sparks and flame. Do not puncture or incinerate container. May cause target organ damage, based on animal data. Use only with adequate ventilation.

Keep container closed.

Contact with rapidly expanding gases can cause frostbite.

Target organs: May cause damage to the following organs: lungs, upper respiratory tract, central

nervous system (CNS).

Routes of entry : Inhalation

Potential acute health effects

Eyes : Contact with rapidly expanding gas may cause burns or frostbite.

Skin : Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : Acts as a simple asphyxiant.

Ingestion : Ingestion is not a normal route of exposure for gases

Potential chronic health effects

Chronic effects : May cause target organ damage, based on animal data.

Target organs : May cause damage to the following organs: lungs, upper respiratory tract, central

nervous system (CNS).

Medical conditions aggravated by over-

exposure

: Pre-existing disorders involving any target organs mentioned in this MSDS as being at

risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

Section 3. Composition, Information on Ingredients

Name CAS number % Volume Exposure limits

Acetylene 74-86-2 100 NIOSH REL (United States, 6/2009).

CEIL: 2662 mg/m³ CEIL: 2500 ppm

Section 4. 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.

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Frostbite Inhalation : Try to warm up the frozen tissues and seek medical attention.

: Move exposed person to fresh air. If not breathing, if breathing is irregular or if

respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

Ingestion

: As this product is a gas, refer to the inhalation section.

Section 5. Fire-fighting measures

Flammability of the product : Flammable.

Auto-ignition temperature

Products of combustion

: 305°C (581°F)

Flash point

: Closed cup: -18.15°C (-0.7°F).

Flammable limits

: Lower: 2.5% Upper: 100% : Decomposition products may include the following materials:

carbon dioxide carbon monoxide

Fire hazards in the presence: Extremely flammable in the presence of the following materials or conditions: open

of various substances

flames, sparks and static discharge, heat and oxidizing materials.

Fire-fighting media and

: In case of fire, use water spray (fog), foam or dry chemical.

instructions

In case of fire, allow gas to burn if flow cannot be shut off immediately. Apply water from a safe distance to cool container and protect surrounding area. If involved in fire, shut off flow immediately if it can be done without risk.

Contains gas under pressure. Flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions

: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). 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 7. Handling and storage

Handling

Use only with adequate ventilation. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. High pressure gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Keep container closed. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Storage

: Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Segregate from oxidizing materials. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

Section 8. Exposure controls/personal protection

Engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protection

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

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

- : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
 - The applicable standards are (US) 29 CFR 1910.134 and (Canada) Z94.4-93

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal protection in case

of a large spill

Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product.

Product name

Ethyne

NIOSH REL (United States, 6/2009).

CEIL: 2662 mg/m³ CEIL: 2500 ppm

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Molecular weight : 26.04 g/mole
Molecular formula : C2-H2

Melting/freezing point : Sublimation temperature: -81.8°C (-115.2 to °F)

Critical temperature: 35.3°C (95.5°F)Vapor pressure: 635 (psig)Vapor density: 0.907 (Air = 1)

Specific Volume (ft ³/lb) : 14.7058

Gas Density (lb/ft 3) : 0.0691 (-80°C / -112 to °F)

Acetylene

Section 10. Stability and reactivity

Stability and reactivity

: The product is stable.

Incompatibility with various substances

: Extremely reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Toxicity data

Chronic effects on humans : May cause damage to the following organs: lungs, upper respiratory tract, central

nervous system (CNS).

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

Aquatic ecotoxicity

Not available.

Products of degradation: Products of degradation: carbon oxides (CO, CO₂) and water.

Environmental fate : Not available.

Environmental hazards: This product shows a low bioaccumulation potential.

Toxicity to the environment : Not available.

Section 13. Disposal considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation.Return cylinders with residual product to Airgas, Inc.Do not dispose of locally.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1001	ACETYLENE, DISSOLVED	2.1	Not applicable (gas).	Produced as	Limited quantity Yes. Packaging instruction Passenger aircraft Quantity limitation: Forbidden. Cargo aircraft Quantity limitation: 15 kg

Build 1.1 Page: 4/6

Acetylene						
TDG Classification	UN1001	ACETYLENE, DISSOLVED	2.1	Not applicable (gas).		Explosive Limit and Limited Quantity Index 0 Passenger Carrying Ship Index 75 Passenger Carrying Road or Rail Index Forbidden Special provisions 38, 42
Mexico Classification	UN1001	ACETYLENE, DISSOLVED	2.1	Not applicable (gas).	PLANAGE CAS	_

[&]quot;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) IUR: Partial exemption

United States inventory (TSCA 8b): This material is listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Ethyne

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Ethyne: Fire hazard, reactive, Sudden release of pressure, Immediate (acute) health hazard

Clean Air Act (CAA) 112 accidental release prevention - Flammable Substances:

Acetylene

Clean Air Act (CAA) 112 regulated flammable substances: Ethyne

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 listed.

Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substances: This material is not listed. New Jersey Hazardous Substances: This material is 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 listed.

Acetylene

Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada)

: Class A: Compressed gas. Class B-1: Flammable gas.

Class F: Dangerously reactive material.

CEPA Toxic substances: This material is not listed.

Canadian ARET: This material is not listed.

Canadian NPRI: This material is listed.

Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances: This material is not listed.

Section 16. Other information

United States

Label requirements

: FLAMMABLE GAS.

MAY CAUSE FLASH FIRE.

MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

CONTENTS UNDER PRESSURE.

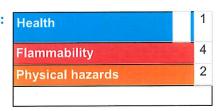
Canada

Label requirements

: Class A: Compressed gas. Class B-1: Flammable gas.

Class F: Dangerously reactive material.

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



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.

ROEN GROLES

HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

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Material Safety Data Sheet



Hydrogen

Section 1. Chemical product and company identification

Product name

: Hydrogen

Supplier

: AIRGAS INC., on behalf of its subsidiaries

259 North Radnor-Chester Road

Suite 100

Radnor, PA 19087-5283

1-610-687-5253

Product use

: Synthetic/Analytical chemistry.

Synonym

Dihydrogen; o-Hydrogen; p-Hydrogen; Molecular hydrogen; H2; UN 1049; UN 1966;

Liquid hydrogen (LH2 or LH2)

MSDS#

001026

Date of

4/26/2010.

Preparation/Revision

In case of emergency

: 1-866-734-3438

Section 2. Hazards identification

Physical state

: Gas or Liquid.

Emergency overview

: WARNING!

GAS:

CONTENTS UNDER PRESURE.

Extremely flammable

Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely flammable

Extremely cold liquid and gas under pressure.

Can cause rapid suffocation. May cause severe frostbite.

Do not puncture or incinerate container.

Contact with rapidly expanding gases or liquids can cause frostbite.

Routes of entry

: Inhalation

Potential acute health effects

Eyes

: Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic liquid can cause frostbite and cryogenic burns.

Skin

: Contact with rapidly expanding gas may cause burns or frostbite. Contact with cryogenic

liquid can cause frostbite and cryogenic burns.

Inhalation

: Acts as a simple asphyxiant.

Ingestion

: Ingestion is not a normal route of exposure for gases Contact with cryogenic liquid can

cause frostbite and cryogenic burns.

Potential chronic health

effects

: CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by overexposure : Acute or chronic respiratory conditions may be aggravated by overexposure to this gas.

See toxicological information (section 11)

Hydrogen

Section 3. Composition, Information on Ingredients

% Volume CAS number **Exposure limits** Name

Oxygen Depletion [Asphyxiant] 1333-74-0 100 Hydrogen

Section 4. 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.

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water **Eye contact** for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical

attention immediately.

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes Skin contact

while removing contaminated clothing and shoes. Wash clothing before reuse. Clean

shoes thoroughly before reuse. Get medical attention immediately.

: Try to warm up the frozen tissues and seek medical attention. **Frostbite**

Move exposed person to fresh air. If not breathing, if breathing is irregular or if Inhalation respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention

immediately.

: As this product is a gas, refer to the inhalation section. Ingestion

Section 5. Fire-fighting measures

Flammability of the product

Auto-ignition temperature

Flammable limits

Products of combustion

of various substances

Fire-fighting media and instructions

: Flammable.

: 399.85 to 573.75°C (751.7 to 1064.8°F)

: Lower: 4% Upper: 75%

: No specific data. Fire hazards in the presence: Extremely flammable in the presence of the following materials or conditions: oxidizing

materials.

: Use an extinguishing agent suitable for the surrounding fire.

Apply water from a safe distance to cool container and protect surrounding area. If

involved in fire, shut off flow immediately if it can be done without risk.

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and

the container may burst or explode.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions

: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). 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. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Handling

: High pressure gas. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder

Never allow any unprotected part of the body to touch uninsulated pipes or vessels that contain cryogenic liquids. Prevent entrapment of liquid in closed systems or piping without pressure relief devices. Some materials may become brittle at low temperatures

and will easily fracture.

Page: 2/6 Build 1.1

Hydrogen

Storage

: Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

For additional information concerning storage and handling refer to Compressed Gas Association pamphlets P-1 Safe Handling of Compressed Gases in Containers and P-12 Safe Handling of Cryogenic Liquids available from the Compressed Gas Association,

Section 8. Exposure controls/personal protection

Engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes

 Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

When working with cryogenic liquids, wear a full face shield.

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

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

The applicable standards are (US) 29 CFR 1910.134 and (Canada) Z94.4-93

Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Insulated gloves suitable for low temperatures

Personal protection in case

of a large spill

: Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product.

Product name

hydrogen

Oxygen Depletion [Asphyxiant]

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Molecular weight : 2.02 g/mole

Molecular formula : H2

Boiling/condensation point : -253.2°C (-423.8°F)

Melting/freezing point : -259.2°C (-434.6°F)

Critical temperature : -240.1°C (-400.2°F)

Vapor density : 0.07 (Air = 1) Liquid Density@BP: 4.43 lb/ft3 (70.96 kg/m3)

Specific Volume (ft ³/lb) : 14.0845 Gas Density (lb/ft ³) : 0.071

Section 10. Stability and reactivity

Stability and reactivity

: The product is stable.

substances

Incompatibility with various: Extremely reactive or incompatible with the following materials: oxidizing materials.

Substances
Hazardous decomposition

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

products
Hazardous polymerization

: Under normal conditions of storage and use, hazardous polymerization will not occur.

Build 1.1

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Hydrogen

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

: No known significant effects or critical hazards. Carcinogenic effects **Mutagenic effects** : No known significant effects or critical hazards. : No known significant effects or critical hazards. Reproduction toxicity

Section 12. Ecological information

Aquatic ecotoxicity

Not available.

Environmental fate

: Not available.

Environmental hazards

: No known significant effects or critical hazards.

Toxicity to the environment : Not available.

Section 13. Disposal considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, local regulation.Return cylinders with residual product to Airgas, Inc.Do not dispose of locally.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN1049	HYDROGEN, COMPRESSED	2.1	Not applicable (gas).	RAMMATE CAS	<u>Limited</u> <u>quantity</u> Yes.
	UN1966	Hydrogen, refrigerated liquid				Packaging instruction Passenger aircraft Quantity limitation: Forbidden. Cargo aircraft Quantity limitation: 150 kg
TDG Classification	UN1049 UN1966	HYDROGEN, COMPRESSED Hydrogen, refrigerated liquid	2.1	Not applicable (gas).	8	Explosive Limit and Limited Quantity Index 0.125 ERAP Index 3000 Passenger Carrying Ship Index Forbidden
						<u>Passenger</u>

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Hydrogen									
						Carrying Road or Rail Index Forbidden			
Mexico Classification	UN1049	HYDROGEN, COMPRESSED	2.1	Not applicable (gas).	TRAMMARE CAS	-			
	UN1966	Hydrogen, refrigerated liquid							

[&]quot;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) IUR: hydrogen

United States inventory (TSCA 8b): This material is listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: hydrogen

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

hydrogen: Fire hazard, Sudden release of pressure Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: hydrogen Clean Air Act (CAA) 112 regulated flammable substances: hydrogen

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

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 listed.
Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substances: This material is not listed. New Jersey Hazardous Substances: This material is 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 listed. Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada)

: Class A: Compressed gas. Class B-1: Flammable gas.

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: This material is not listed.

Section 16. Other information

United States

Label requirements

: GAS:

CONTENTS UNDER PRESURE.

Extremely flammable

Do not puncture or incinerate container.

Can cause rapid suffocation. May cause severe frostbite.

LIQUID:

Extremely flammable

Extremely cold liquid and gas under pressure.

Can cause rapid suffocation. May cause severe frostbite.

Canada

Label requirements

: Class A: Compressed gas. Class B-1: Flammable gas.

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



liquid:



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



liquid:



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.



HAZARDOUS MATERIALS INVENTORY FORM

FORM 3

DEPART						,	Page /	2 of 12	· 2
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CHEMICAL LOCATION		1.6							4
	·	<u> </u>				- Langu		a C	
CONFIDENTIAL LOCATION EPCRA	Yes	□ No 5	MAP#			6 GRID#	レー	9	
		II. CH	IEMICAL IN	FORMATION					
CHEMICAL NAME	. ^ .	.1. 1		WASTE	2 Yes	8 TRADE SE	CRET	Yes No	11
Mixed	FRID 6	4mstc						instructions	12
COMMON NAME MIX &	Arip	Unste				AILLIOO		A Yes No No amounts must be LBS	12
CAS#		AZARD CLASSES	(supplied by GG	FD)			:		13
TYPE (Check one item only) a. PURE	Z b. MIXTURE	c.	WASTE 14	RADIOACTIVE	Yes	№ 1	5 CUI	RIES	16
PHYSICAL STATE a. SOLID	b. LIQUID	C. GAS		HAZARD a. GORIES	FIRE [b. REACTIVE		c. PRESSURE RELEASE	18
(Check one flem only)					ACUTE HEA			e. CHRONIC HEALTH	22
AVERAGE DAILY 30	MAXIMUM DAILY AMOUNT	70	20 AN	INUAL WASTE AMOU	INT	21 ST/	ATE WAS	STE CODE	
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			201				3	gover	
		e. PLASTIC		☐ i. VAT ☐ i. FIBER DRUM	=	CYLINDER GLASS CONTAIN	JER	q. TANK WAGON	26
CARROLL CONTROL CONTRO	(INSIDE BLDG	g METAL CO	ONTAINER	I. BAG(S)	□。	PLASTIC CONTA	INER	s. TOTE BIN	l
	L DRUM	h. CARBOY		I. BOX(S)		IN MACH OR EQ	UIP	t. OTHER	27
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COMPANY OF THE SECOND STATE OF THE PROPERTY OF	a. AMBIENT	A CONTRACTOR OF THE PARTY OF TH	b. ABOVE AMBIE		c. BELOW		d	. CRYOGENIC	20
%WT HAZ	ARDOUS COM	PONENT (F	or mixture or u	vaste only)		EHS		CAS#	
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2 10 29 Hypri	och logic	. Az	10	30	Z Ye:		31	7647-01-	
3 5 29 504	LEURIC	ALID		30	Ye:	s □ No	31	1664-93.	932
4 75 29 W	ATRY			30	_ ☐ Ye	ok/Ag a	31		32
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If more hazardous components are present at	greater than 1% by weig				ttach additio	nal sheets of pape	er capturii	ng the required information.	
and the second s		PLAC	ARDING IN	FORMATION					
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DOT HAZARD CLASS			34			ALTH INC.	X	(VEITOM)	1
R	efer to shipping	papers or M			`	SPECIAL X	$\langle \ \rangle$	WHITE 37	
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