



SDS# 1000000053

Safety Data Sheet

Compressed Gas, N.O.S. (Argon, Carbon Dioxide)

Arc3 Gases

1660 Hwy 301 S, Dunn, NC, 28334

Phone : 910-892-4016

Emergency Phone : INFOTRAC 1-800-535-5053

www.arc3gases.com

Section 1: Product and Company Identification

Arc3 Gases

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Phone : 910-892-4016

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Product Code: SDS# 1000000053

Part Number:

Synonyms: Argon Balance, Carbon Dioxide 2-30%

Recommended Use: Not Known

Usage Restrictions: Not Known

Section 2: Hazards Identification



Hazard Classification:

Gases Under Pressure, H280

Simple Asphyxiant, OSHA-H01

Hazard Statements:

H280: CONTAINS GAS UNDER PRESSURE; MAY EXPLODE WHEN HEATED.

CGA-HG03: MAY INCREASE RESPIRATION AND HEARTRATE.

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

Precautionary Statements

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing.

P271+P403: Use and store only outdoors or in a well-ventilated place.

CGA-PG02: Protect from sunlight when ambient temperature exceeds 52C (125F).

CGA-PG05: Use a back flow preventive device in the piping.

CGA-PG06: Close valve after each use and when empty.

CGA-PG10+CGA-PG20: Use only with equipment of compatible materials of construction and rated for cylinder pressure.

CGA-PG11: Never put cylinders into unventilated areas of passenger vehicles.

CGA-PG12: Do not open valve until connected to equipment prepared for use.

CGA-PG27: Read and follow the Safety Data Sheet (SDS) before use.

Section 3: Composition/Information on Ingredients

	CAS #	Concentration
Argon	7440-37-1	Balance
Carbon Dioxide	124-38-9	2-30%

	Trade Names
Argon	Ar, Argon, Argon-40, Argon36, argon atom, argon(0)
Carbon Dioxide	Carbon dioxide carbonic anhydride Dry ice 124-38-9 carbonic acid gas Carbonic acid anhydride

Section 4: First Aid Measures

IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

Section 5: Fire Fighting Measures**Suitable Extinguishing Media:**

Use suitable extinguishing material for surrounding fire.

Protection of Firefighters:

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

Products of Combustion

Oxides of carbon

Section 6: Accidental Release Measures**Personal Precautions:**

Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.

Environmental Precautions:

Keep away from drains, surface and ground water. Avoid heat, flames, sparks and other sources of ignition.

Methods for Containment and Cleanup:

Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. If necessary, cover drains. Absorb large spills, dispose in appropriate containers.

Section 7: Handling and Storage**Handling:**

See precautions in Section 2. Only trained personnel should handle this product. Always use approved personal protective equipment.

Storage:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep separated from incompatible substances.

Incompatible Materials

Combustible Materials, Oxidizing Agents, Metallic Salts, Reducing Agents, Metal Carbide, Metals, Bases

Conditions to avoid

Avoid heat, flames, sparks and other sources of ignition.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines	Threshold Limit Value -TLV (ppm)
Argon	Not available
Carbon Dioxide	5000

Engineering Controls

Use only with adequate ventilation or in a closed system.

Eye Protection

Wear splash resistant safety goggles.

Skin Protection

Wear chemical protective clothing, including gloves.

Respiratory Protection

Use self-contained breathing apparatus.

General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

	Physical State / Physical Form	Appearance / Color	Odor	Flash Point	Flammability	Partition Coefficient
Argon	Gas	Colorless	Odorless	Nonflammable.	Nonflammable.	0
Carbon Dioxide	Gas	Colorless	Odorless	Nonflammable.	Nonflammable.	1

	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits	Boiling Point	Freezing Point	Vapor Pressure
Argon	Nonflammable.	Not available	Not available	-303 F (-186 C)	-308 F (-189 C)	Not available
Carbon Dioxide	Nonflammable.	Not available	Not available	Not Available.	-71 F (-57 C) @ 4000 mmHg	844.7

	Vapor Density	Specific Gravity	Water Solubility	pH	Evaporation Rate	Viscosity
Argon	1.38	Not applicable	3.36% @ 20 C	0	Not applicable	0.0225 cP @ 25 C
Carbon Dioxide	1.5	1.522 @ 21 C	Soluble	0	Not applicable	0.01657 cP @ 0 C

	Molecular Weight	Molecular Formula	Density	Volatility	Solvent Solubility
Argon	39.95	Ar	Not available	Not applicable	Soluble : Organic solvents
Carbon Dioxide	44.009	CO2	Not available	Not applicable	Soluble : Alcohol, acetone, hydrocarbons, organic solvents

Section 10: Stability and Reactivity

	Stability	Possibility of Hazardous Reactions
Argon	Stable at normal temperature and pressure	Will not polymerize.
Carbon Dioxide	Stable at normal temperature and pressure	Will not polymerize.

Conditions to avoid

Avoid heat, flames, sparks and other sources of ignition.

Incompatible Materials

Combustible Materials, Oxidizing Agents, Metallic Salts, Reducing Agents, Metal Carbide, Metals, Bases

Hazardous Decomposition Products

Oxides of carbon

Section 11: Toxicology Information

The toxicology information is calculated for the mixture.

Acute Toxicity Estimates (ATE) of the mixture.

Oral ATE (mg/kg)	Not available
Inhalation ATE (ppm)	Not available
Dermal ATE (mg/kg)	Not available

Additional health hazards:

OSHA-H01: MAY DISPLACE OXYGEN AND CAUSE RAPID SUFFOCATION.

Skin Corrosion/Irritation	Not available
Eye Damage/Irritation	Not available
Respiratory or Skin Sensitization	Not available
Germ Cell Mutagenicity	Not available
Carcinogenicity	Not available
Reproductive Toxicity	Not available
STOT – single exposure	Not available
STOT – repeated exposure	Not available
Aspiration Hazard	Not available

Section 12: Ecological Information**Fate and Transport**

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Argon	Fish toxicity: 0	Not Available.	Not Available.	Not Available.
Carbon Dioxide	Fish toxicity: 0	Biodegradable.	Accumulates very little in the bodies of living organisms.	Leaches through the soil or the sediment at a moderate rate.

Section 13: Disposal Considerations

Dispose in accordance with all applicable regulations. Do not dispose in sewers or waterways. Recycle if possible to do so. Return to manufacturer for disposal if needed.

Section 14: Transportation Information

Mixture Information

	US DOT	CA TDG	IATA	IMDG
Shipping Name	Compressed gas, n.o.s. (Argon, Carbon Dioxide)	Compressed gas, n.o.s. (Argon, Carbon Dioxide)	Compressed gas, n.o.s. (Argon, Carbon Dioxide)	Compressed gas, n.o.s. (Argon, Carbon Dioxide)
UN Number	UN1956	UN1956	UN1956	UN1956
Hazard Class	2.2 	2.2 	2.2 	2.2 
Hazard Information	NonFlammable Gas		QTY LIMITS (Pass/Cargo) Forbidden/30 kg	EmS F-C, S-V

Individual Component Information

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Passenger Aircraft or Railcar Quantity Limitations		Cargo Aircraft Only Quantity Limitations		IMDG EmS
					DOT	IATA	DOT	IATA	
Argon	Argon, Compressed	UN1006	2.2	Not available	50 kg	Forbidden	500 kg	30 kg	F-C, s-v
Carbon Dioxide	Carbon Dioxide	UN1013	2.2	Not available	50 kg	Forbidden	500 kg	30 kg	F-C, s-v

Section 15: Regulatory Information

U.S. Regulations

	CERCLA Sections	RQ	TPQ
Argon	Not regulated	Not regulated	Not regulated
Carbon Dioxide	Not regulated	Not regulated	Not regulated

SARA 370.21

	Acute	Chronic	Fire	Reactive	Sudden Release
Argon	Yes	No	No	No	Yes
Carbon Dioxide	Yes	No	No	No	Yes

SARA 372.65

Argon	Not regulated
Carbon Dioxide	Not regulated

OSHA Process Safety

Argon	Not regulated
Carbon Dioxide	Not regulated

State Regulations

	CA Proposition 65
Argon	Not listed
Carbon Dioxide	Not listed

Canadian Regulations

	WHMIS Classification
Argon	A
Carbon Dioxide	A

National Inventory Status

	US Inventory (TSCA)	TSCA 12b Export Notification	Canada Inventory (DSL/NDSL)
Argon	Argon	Not listed	Listed on DSL
Carbon Dioxide	Carbon dioxide	Not listed	Listed on DSL

Section 16: Other Information

	NFPA Rating (Health, Fire, and Reactivity)
Argon	3 , 0 , 0
Carbon Dioxide	2 , 0 , 0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard