

# **Safety Data Sheet**

# CoverShield 6

WestAir Gases & Equipment Inc. 2506 Market St San Diego, CA 92102 619-239-7571 http://westairgases.com

## **Section 1: Product and Company Identification**

WestAir Gases & Equipment Inc.

2506 Market St San Diego, CA 92102 619-239-7571 http://westairgases.com

Product Code: CoverShield 6
Synonyms:
Recommended Use:
Usage Restrictions:

### **Section 2: Hazards Identification**



Hazard Classification: Gases Under Pressure

**Hazard Statements:** 

Contains gas under pressure; may explode if heated

Precautionary Statements
Asphyxiant in high concentrations.

Storage:

Protect from sunlight. Store in well-ventilated place.

## **Section 3: Composition/Information on Ingredients**

	CAS#	Concentration Range
Argon	7440-37-1	75-85%
Carbon Dioxide	124-38-9	5-25%

	Chemical Substance	Chemical Family	Trade Names
Argon	ARGON, COMPRESSED	Inorganic gases	ARGON; UN 1006; AR
Carbon Dioxide	CARBON DIOXIDE, GAS	Inorganic gases	CARBONIC ACID GAS; CARBONIC ANHYDRIDE; CARBON DIOXIDE; CARBON OXIDE; UN 1013; CO2

### **Section 4: First Aid Measures**

	Skin Contact	Eye Contact	Ingestion	Inhalation	Note to Physicians
Argon	Not applicable route of exposure	Flush eyes with plenty of water.	Not applicable route of exposure	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	For inhalation, consider oxygen.
Carbon	If frostbite or freezing occur,	Contact with liquid:	Do not	If adverse effects occur, remove to	For
Dioxide	immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention.	Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.	induce vomiting.	uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	inhalation, consider oxygen.

## **Section 5: Fire Fighting Measures**

	Suitable Extinguishing Media	Products of Combustion	Protection of Firefighters
Argon	Non-flammable gas	Not applicable	■ N/A ■ N/A
Carbon Dioxide	Non-flammable	Non-flammable	<ul> <li>Any appropriate escape-type, self-contained breathing apparatus.</li> <li>Non-flammable</li> </ul>

### **Section 6: Accidental Release Measures**

	Personal Precautions	Environmental Precautions	Methods for Containment
Argon	Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.	None known.	Stop leak if possible without personal risk.
Carbon Dioxide	Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Do not touch spilled material.	Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.	Stop leak if possible without personal risk.

	Methods for Cleanup	Other Information
Argon	Leaks may be detected by a soapy-water solution.	
Carbon Dioxide	Stop leak, evacuate, remove source of ignition.	None

## Section 7: Handling and Storage

	Handling	Storage
Argon	Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.	Avoid using in confined spaces.
Carbon	Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from	Store and handle in accordance with
Dioxide	incompatible substances.	all current regulations and standards

## **Section 8: Exposure Controls/Personal Protection**

	Exposure Guidelines
Argon	ARGON, COMPRESSED: ARGON: ACGIH (simple asphyxiant)
Carbon	CARBON DIOXIDE, GAS: CARBON DIOXIDE: 5000 ppm (9000 mg/m3) OSHA TWA 10000 ppm (18000 mg/m3) OSHA TWA
Dioxide	(vacated by 58 FR 35338, June 30, 1993) 30000 ppm (54000 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)
	5000 ppm ACGIH TWA 30000 ppm ACGIH STEL 5000 ppm (9000 mg/m3) NIOSH recommended TWA 10 hour(s) 30000 ppm
	(54000 mg/m3) NIOSH recommended STEL

### **Engineering Controls**

Handle only in fully enclosed systems.

	Eye Protection	Skin Protection	Respiratory Protection
Argon	Eye protection not required, but recommended.	Protective clothing is not required.	N/A
Carbon Dioxide	For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.	For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.	Any appropriate escape-type, 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	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
Argon	Gas	Colorless	Colorless	N/A	Gas	Odorless	Tasteless
Carbon Dioxide	Gas	Colorless	Colorless	N/A	Gas	Odorless	Acid taste

	Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
Argon	Not flammable			Nonflammable	Nonflammable	Nonflammable
Carbon Dioxide	Not flammable	Not available	N/A	Nonflammable	Nonflammable	Nonflammable

	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	рН	Odor Threshold	Evaporation Rate	Viscosity
Argon	-303 F (- 186 C)	-308 F (- 189 C)	500 mmHg @ -190 C	1.38 (Air=1)	Not applicable	3.36% @ 20 C	Not applicable	Not available	Not applicable	0.0225 cP @ 25 C

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	Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	рН	Odor Threshold	Evaporation Rate	Viscosity
Carbon Dioxide	Not available	-71 F (- 57 C) @ 4000 mmHg	43700 mmHg @ 21 C	1.5 (Air=1)	1.522 @ 21 C	Soluble	3.7 (saturated aqueous solution) @ 101.3 kPa (carbonic acid)	Not available	Not applicable	0.01657 cP @ 0 C

	Molecular Weight	Molecular Formula	Density	Weight per Gallon	Volatility by Volume	Volatility	Solvent Solubility
Argon	39.948	AR	1.784 g/L @ 0 C	Not available	100%	Not applicable	Soluble: Organic solvents
Carbon Dioxide	44.01	C-O2	0.114	Not available	Not applicable	Not applicable	Soluble: Alcohol, acetone, hydrocarbons, organic solvents

## **Section 10: Stability and Reactivity**

	Stability	Conditions to Avoid	Incompatible Materials
Argon	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	No data available.
Carbon Dioxide	Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Combustible materials, oxidizing materials, metal salts, reducing agents, metal carbide, metals, bases

	<b>Hazardous Decomposition Products</b>	Possibility of Hazardous Reactions
Argon	No data available.	Will not polymerize.
Carbon Dioxide	Carbon monoxide	Will not polymerize.

## **Section 11: Toxicology Information**

### **Acute Effects**

	Oral LD50	Dermal LD50	Inhalation
Argon	Not established	Not established	Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma
Carbon Dioxide	Not established	Not established	Ringing in the ears, nausea, irregular heartbeat, headache, drowsiness, dizziness, tingling sensation, visual disturbances, suffocation, convulsions, coma

	Eye Irritation	Skin Irritation	Sensitization
Argon	No information on significant adverse effects	No information on significant adverse effects	
Carbon Dioxide	Irritation, frostbite, blurred vision	Liquid: blisters, frostbite	Difficulty breathing

### **Chronic Effects**

	Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
Argon	Not established	Not established	Not established	No data
Carbon Dioxide	Not available	Not established	Available.	No data

## **Section 12: Ecological Information**

**Fate and Transport** 

	Eco toxicity	Persistence / Degradability	Bioaccumulation / Accumulation	Mobility in Environment
Argon	Fish toxicity: Not available Invertibrate toxicity: Not available Algal toxicity: Not available Phyto toxicity: Not available	Not available	Not available	Not available

	Other toxicity: Not available			
Carbon	Fish toxicity: 150000 ug/L 48	Relatively non-persistent in the	Accumulates very little in the	Leaches through
Dioxide	day(s) (Mortality) Brown trout	environment. Moderately volatile	bodies of living organisms.	the soil
	(Salmo trutta)	from water.		
	Invertibrate toxicity: Not available			
	Algal toxicity: Not available			
	Phyto toxicity: Not available			
	Other toxicity: Not available			

## Section 13: Disposal Considerations

Argon	Dispose in accordance with all applicable regulations.
Carbon Dioxide	Dispose in accordance with all applicable regulations.

## **Section 14: Transportation Information**

### U.S. DOT 49 CFR 172.101

#### **DOT Information for This Mixture**

or intermediation for the initial					
Shipping Name	ing Name Compressed gas, n.o.s. (Argon, Carbon Dioxide)				
UN Number	UN1956				
Hazard Class	2.2				
Hazard Information	Non-Flammable Gas				

### **Individual Component Information**

	Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Description
Argon	Argon, compressed	UN1006	2.2	Not applicable	2.2	75 kg or L	150 kg	N/A
Carbon Dioxide	Carbon dioxide	UN1013	2.2	Not applicable	2.2	75 kg or L	150kg	None

### **Canadian Transportation of Dangerous Goods**

	Shipping Name	UN Number	Class	Packing Group / Risk Group
Argon	Argon, compressed	UN1006	2.2	Not applicable
Carbon Dioxide	Carbon dioxide	UN1013	2.2	Not applicable

## **Section 15: Regulatory Information**

### **U.S. Regulations**

	CERCLA Sections	SARA 355.30	SARA 355.40
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.	

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### **OSHA Process Safety**

Argon	Not regulated.
Carbon Dioxide	Not regulated.

### **State Regulations**

_	CA Proposition 65	
Argon	Not regulated.	
Carbon Dioxide	Not regulated.	

### **Canadian Regulations**

3			
	WHMIS Classification		
Argon	Α		
Carbon Dioxide	Α		

### **National Inventory Status**

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

## **Section 16: Other Information**

	NFPA Rating
Argon	HEALTH=0 FIRE=0 REACTIVITY=0
Carbon Dioxide	HEALTH=2 FIRE=0 REACTIVITY=0

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