

Safety Data Sheet P-18-44018

This SDS conforms to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

Date of issue: 08/13/2019

SECTION: 1. Product and company identification

1.1. Product identifier

Product form : Mixture

Product name : Balance Air - Carbon Dioxide 0.000001% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%,

Methane 0.000001% - 0.1% (5 Component Range)

Other means of identification : Mixure of Carbon Dioxide, Carbon Monoxide, Methane, Nitrous Oxide and Air

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial use; Use as directed.

1.3. Details of the supplier of the safety data sheet

Praxair, Inc. 10 Riverview Drive

Danbury, CT 06810-6268 - USA

T 1-800-772-9247 (1-800-PRAXAIR) - F 1-716-879-2146

www.praxair.com

1.4. Emergency telephone number

Emergency number : Onsite Emergency: 1-800-645-4633

CHEMTREC, 24 hr/day 7 days/week

- Within USA: 1-800-424-9300, Outside USA: 001-703-527-3887

(collect calls accepted, Contract 17729)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS-US classification

Press. Gas (Comp.)

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



. . . .

Signal word (GHS US) : Warning

Hazard statements (GHS US)

: H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED

OSHA H01 - MAY DISPLACE OXYGEN AND CAUSE PARID SUFFOCATION

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

Precautionary statements (GHS US) : P271+P403 - Use and store only outdoors or in a well-ventilated place. CGA-PG05 - Use a back flow preventive device in the piping.

CGA-PG10 - Use only with equipment rated for cylinder pressure.

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

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

2.3. Other hazards

Other hazards not contributing to the

classification

: Asphyxiant in high concentrations.

2.4. Unknown acute toxicity (GHS US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Air	(CAS-No.) 132259-10-0	99.6001 - 99.99996
Nitrous oxide	(CAS-No.) 10024-97-2	0.000001 - 0.1
Methane	(CAS-No.) 74-82-8	0.000001 - 0.1
Carbon dioxide	(CAS-No.) 124-38-9	0.000001 - 0.1
Carbon monoxide	(CAS-No.) 630-08-0	0.000001 - 0.0999

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a physician.

First-aid measures after eye contact

: 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. Contact an ophthalmologist immediately.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Reactivity : No reactivity hazard other than the effects described in sub-sections below.

5.3. Advice for firefighters

Firefighting instructions

: Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Stop flow of gas if safe to do so, while continuing cooling water spray. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with their provincial and local fire code regulations.

Protection during firefighting

: Compressed gas: asphyxiant. Suffocation hazard by lack of oxygen.

Special protective equipment for fire fighters

: Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire

Other information

: Containers are equipped with a pressure relief device. (Exceptions may exist where authorized

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

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6.2. Environmental precautions

Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: 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.

OTHER PRECAUTIONS FOR HANDLING, STORAGE, AND USE: When handling product under pressure, use piping and equipment adequately designed to withstand the pressures to be encountered. Never work on a pressurized system. Use a back flow preventive device in the piping. Gases can cause rapid suffocation because of oxygen deficiency; store and use with adequate ventilation. If a leak occurs, close the container valve and blow down the system in a safe and environmentally correct manner in compliance with all international, federal/national, state/provincial, and local laws; then repair the leak. Never place a container where it may become part of an electrical circuit.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Carbon monoxide (630-08-0)			
ACGIH	ACGIH TLV-TWA (ppm)	25 ppm	
USA OSHA	OSHA PEL (TWA) (mg/m³)	55 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm	
Nitrous oxide (10024-97-2)			
ACGIH	ACGIH TLV-TWA (ppm)	50 ppm	
Methane (74-82-8)			
ACGIH	Not established		

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Methane (74-82-8)					
USA OSHA	Not established				
Carbon dioxide (124-38	Carbon dioxide (124-38-9)				
ACGIH	ACGIH TLV-TWA (ppm)	5000 ppm			
ACGIH	ACGIH TLV-STEL (ppm)	30000 ppm			
USA OSHA	OSHA PEL (TWA) (mg/m³)	9000 mg/m³			
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm			
Air (132259-10-0)					

Exposure controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Ensure exposure is below occupational

exposure limits (where available).

Eye protection

Wear safety glasses with side shields.

Wear metatarsal shoes and work gloves for cylinder handling, and protective clothing where Skin and body protection

needed. Wear appropriate chemical gloves during cylinder changeout or wherever contact with

product is possible.

Respiratory protection

Physical state

When workplace conditions warrant respirator use, follow a respiratory protection program that meets or exceeds the requirements of the appropriate Health and Safety Regulations. 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. For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Thermal hazard protection : Wear cold insulating gloves when transfilling or breaking transfer connections.

: Gas

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Colour Colourless : No data available Odour Odour threshold No data available pΗ Not applicable. Relative evaporation rate (butylacetate=1) No data available Relative evaporation rate (ether=1) Not applicable. Melting point No data available Freezing point No data available Boiling point No data available Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) No data available Not applicable. Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available Solubility Water: No data available

Log Pow Not applicable. Not applicable. Log Kow Viscosity, kinematic : Not applicable. Viscosity, dynamic : Not applicable.

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Explosive properties : Not applicable.

Oxidizing properties : None.

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Carbon monoxide (630-08-0)	
LC50 inhalation rat (ppm)	3760 ppm/1h
ATE US (gases)	1880 ppmv/4h

Nitrous oxide (10024-97-2)

LC50 inhalation rat (ppm) > 250 ppm/4h

Skin corrosion/irritation : Not classified

pH: Not applicable.

Serious eye damage/irritation : Not classified

pH: Not applicable.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated : Not classified

exposure)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

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Mobility in soil

Balance Air - Carbon Dioxide 0.000001% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component Range)

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2.2. Persistence and degradability	
	% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component
Persistence and degradability	No ecological damage caused by this product.
	The coolegical dumage caused by the product.
Nitrous oxide (10024-97-2) Persistence and degradability	Not applicable for inorganic gases.
	Not applicable for inorganic gases.
Methane (74-82-8)	The substance is readily bindervadable. Unlikely to remain
Persistence and degradability	The substance is readily biodegradable. Unlikely to persist.
Carbon dioxide (124-38-9)	
Persistence and degradability	No ecological damage caused by this product.
Air (132259-10-0)	
Persistence and degradability	No ecological damage caused by this product.
2.3. Bioaccumulative potential	
Balance Air - Carbon Dioxide 0.000001 Range)	% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component
Log Pow	Not applicable.
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.
Carbon monoxide (630-08-0)	
Log Kow	Not applicable.
Nitrous oxide (10024-97-2)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No data available.
Methane (74-82-8)	
Log Pow	1.09
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Carbon dioxide (124-38-9)	,,,
BCF fish 1	(no bioaccumulation)
Log Pow	0.83
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.
Air (132259-10-0)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No ecological damage caused by this product.
2.4. Mobility in soil	.0
-	% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component
Mobility in soil	No data available.
<u> </u>	TO SHOW STUIMSTO.
Carbon monoxide (630-08-0)	No data available.
Mobility in soil	INO Udia avaliable.
Nitrous oxide (10024-97-2)	Decree of the high controller, the second of
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Methane (74-82-8)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Carbon dioxide (124-38-9)	

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No data available.



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Carbon dioxide (124-38-9)			
Ecology - soil No ecological damage caused by this product.			
Air (132259-10-0)			
Ecology - soil	No ecological damage caused by this product.		

12.5. Other adverse effects

Effect on the ozone layer : None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international

regulations. Contact supplier for any special requirements.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1956 Compressed gas, n.o.s., 2.2

UN-No.(DOT) : UN1956

Proper Shipping Name (DOT) : Compressed gas, n.o.s.
Hazard labels (DOT) : 2.2 - Non-flammable gas



DOT Symbols : G - Identifies proper shipping name (PSN) requiring the addition of technical name(s) in

parentheses following the PSN.

Additional information

Other information : No supplementary information available.

Special transport precautions : Avoid transport on vehicles where the load space is not separated from the driver's

compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers:
- Ensure there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure cylinder valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

Transport by sea

UN-No. (IMDG) : 1956

Proper Shipping Name (IMDG) : COMPRESSED GAS, N.O.S.

Class (IMDG) : 2.2 - Non-flammable, non-toxic gases

Air transport

UN-No. (IATA) : 1956

Proper Shipping Name (IATA) : COMPRESSED GAS, N.O.S.

Class (IATA) : 2

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

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15.2. International regulations

CANADA

Carbon monoxide (630-08-0)

Listed on the Canadian DSL (Domestic Substances List)

Nitrous oxide (10024-97-2)

Listed on the Canadian DSL (Domestic Substances List)

Methane (74-82-8)

Listed on the Canadian DSL (Domestic Substances List)

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

Air (132259-10-0)

EU-Regulations

15.2.2. National regulations

No additional information available

15.3. US State regulations

Balance Air - Carbon Dioxide 0.000001% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component Range)()			
U.S California - Proposition 65 - Carcinogens List	No		
U.S California - Proposition 65 - Developmental Toxicity	No		
U.S California - Proposition 65 - Reproductive Toxicity - Female	No		
U.S California - Proposition 65 - Reproductive Toxicity - Male	No		

Carbon monoxide (630-08-0	9)			
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
Nitrous oxide (10024-97-2)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	Yes	No	
Methane (74-82-8)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

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Carbon dioxide (124-38-9)

Balance Air - Carbon Dioxide 0.000001% - 0.1%, Carbon Monoxide 0.000001% - 0.0999%, Methane 0.000001% - 0.1% (5 Component Range)

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U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	No significant risk level (NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
No	No	No	No	
Air (132259-10-0)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

Carbon monoxide (630-08-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

Nitrous oxide (10024-97-2)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Methane (74-82-8)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

Carbon dioxide (124-38-9)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

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SECTION 16: Other information

Other information

: When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Praxair asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Praxair, Inc, it is the user's obligation to determine the conditions of safe use of the product.

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SDS US (GHS HazCom 2012) - PDI

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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