

Safety Data Sheet P-18-48795

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

Date of issue: 03/18/2020 Version: 1.0

SECTION: 1. Product and company identification

1.1. Product identifier

Product form : Mixture

Product name : Carbon dioxide balance - Acetylene 0.1ppm - 4.43%

Other means of identification : Mixture of Acetylene and Carbon dioxide

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 (Liq.) H280

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



GHS04

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 RAPID SUFFOCATION.

CGA-HG03 - MAY INCREASE RESPIRATION AND HEART RATE.

CGA-HG01 - MAY CAUSE FROSTBITE.

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). P202 - Do not handle until all safety precautions have been read and understood. P304, P340, P313 - IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Get medical advice/attention.

2.3. Other hazards

Other hazards not contributing to the

classification

: Asphyxiant in high concentrations.

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2.4. **Unknown acute toxicity (GHS US)**

No data available

SECTION 3: Composition/information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%
Carbon dioxide	(CAS-No.) 124-38-9	95.57 - 99.99999
Acetylene	(CAS-No.) 74-86-2	0.00001 - 4.43

SECTION 4: First aid measures

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

First-aid measures after skin contact

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

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

Extinguishing media

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

Special hazards arising from the substance or mixture 5.2.

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 fighters.

Other information

Containers are equipped with a pressure relief device. (Exceptions may exist where authorized by TC.).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures 6.1.

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

Acetylene (74-86-2)

ACGIH	Not established		
USA OSHA	Not established		
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	

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8.2. 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.

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

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

product is possible.

Respiratory protection : 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Gas
Colour : Colourless
Odour : No data available

Odour threshold : No data available pH : 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 Vapour pressure Not applicable. Relative vapour density at 20 °C No data available

Solubility : Water: No data available

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

Oxidizing properties : None.

Explosive limits : No data available

9.2. Other information

No additional information available

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Relative density

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

10.2. Chemical stability

Stable under normal conditions.

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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**

Information on toxicological effects

Acute toxicity : Not classified

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 STOT-single exposure Not classified STOT-repeated exposure Not classified Aspiration hazard : Not classified

SECTION 12: Ecological information

Toxicity

No additional information available

Persistence and degradability 12.2.

Carbon dioxide balance - Acetylene 0.1ppm -	bon dioxide balance - Acetylene 0.1ppm - 4.43%		
Persistence and degradability	No ecological damage caused by this product.		
Carbon dioxide (124-38-9)			
Persistence and degradability	No ecological damage caused by this product.		

Bioaccumulative potential 12.3.

arbon dioxide balance - Acetylene 0.1ppm - 4.43%		
Log Pow Not applicable.		
Log Kow Not applicable.		
Bioaccumulative potential No ecological damage caused by this product.		
Carbon dioxide (124-38-9)		
BCF fish 1	(no bioaccumulation)	
Log Pow	0.83	
Log Kow	Kow Not applicable.	
Bioaccumulative potential	accumulative potential No ecological damage caused by this product.	

12.4. **Mobility in soil**

Carbon dioxide balance - Acetylene 0.1ppm - 4.43%	
Mobility in soil	No data available.

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Carbon dioxide (124-38-9)		
Mobility in soil	No data available.	
Ecology - soil	No ecological damage caused by this product.	

12.5. Other adverse effects

Effect on the ozone layer : None.

SECTION 13: Disposal considerations

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 : UN3163 Liquefied gas, n.o.s., 2.2

UN-No.(DOT) : UN3163

Proper Shipping Name (DOT) : Liquefied 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.

DOT Special Provisions (49 CFR 172.102) T50 - When portable tank instruction T50 is referenced in Column (7) of the 172.101 Table, the

applicable liquefied compressed gases are authorized to be transported in portable tanks in

accordance with the requirements of 173.313 of this subchapter.

Additional information

Other information : No supplementary information available.

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

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) : 3163

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

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

Air transport

UN-No. (IATA) : 3163

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

Class (IATA)

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

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15.2. International regulations

CANADA

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

15.2.2. **National regulations**

No additional information available

15.3. US State regulations		
Carbon dioxide balance - Acetylene 0.1ppm - 4.43%()		
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	

Acetylefie (74-00-2)				
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
No	No	No	No	
Carbon dioxide (124-38-9)				
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
No	No	No	No	

Carbon dioxide (124-38-9)

Acetylene (74-86-2)

- 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



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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

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

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