

Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

SECTION: 1. Product and company identification

I.1. Product identifier

Product form : Mixture MSA P/N 710876,710878,710880,803499,804866, 804870, 806905, 806906, 812785,

812786, 812823, 813368, 813369

Product code : Non-flammable, Non-oxidizing gas mixture containing one or more of the following components:

R-11, R-113, R-114, R-12, R-22, Oxygen, Nitrogen.

MSA Part Numbers: : 806905, 803499, 812785, 710880, 804870, 813368, 813369, 804866, 812823, 710878, 806906,

804868, 812786, 710876

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

Use of the substance/mixture : Calibration/Reference Material Use of the substance/mixture : Industrial use. Use as directed.

1.3. Details of the supplier of the safety data sheet

MSA Safety Inc.

1000 Cranberry Woods Drive

Cranberry Township, PA 16066 - USA

Phone: 724-776-8600

Info.us@msasafety.com

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Compressed gas H280

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS04

Signal word (GHS-US) : WARNING

Hazard statements (GHS-US) : H280 - CONTAINS GAS UNDER PRESSURE; MAY EXPLODE IF HEATED

Precautionary statements (GHS-US) : P410+P403 - Protect from sunlight. Store in a well-ventilated place

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%
Nitrogen	(CAS No) 7727-37-9	79.1 - 99.999
Oxygen	(CAS No) 7782-44-7	0.0001 - 20.9
Chlorodifluoromethane		0.0001 - 1
Dichlorodifluoromethane (R12)	(CAS No) 75-71-8	0.0001 - 1
1,1,2-Trichloro-1,2,2-trifluoroethane	(CAS No) 76-13-1	0.0001 - 0.5
Trichlorofluoromethane	(CAS No) 75-69-4	0.0001 - 0.2

EN (English US) SDS ID: PTG-4024 1/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

T	Name	Product identifier	%
	Dichlorotetrafluoroethane (R114)	(CAS No) 76-14-2	0.0001 - 0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, qualified personnel may give oxygen. Call a physician.

First-aid measures after skin contact : Adverse effects not expected from this product.

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.

First-aid measures after ingestion : Ingestion is not considered a potential route of exposure.

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 OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.

Special protective equipment for fire fighters

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

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

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.

EN (English US) SDS ID: PTG-4024 2/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

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

Trichlorofluoromethane (75-	69-4)	
ACGIH	ACGIH TLV-C (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	5600 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
1,1,2-Trichloro-1,2,2-trifluoro	pethane (76-13-1)	
ACGIH	ACGIH TLV-TWA (ppm)	1000 ppm
ACGIH	ACGIH TLV-STEL (ppm)	1250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	7600 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Oxygen (7782-44-7)		
ACGIH	Not established	
USA OSHA	Not established	
Chlorodifluoromethane		
ACGIH	Not established	
USA OSHA	Not established	
Dichlorodifluoromethane (R	12) (75-71-8)	
ACGIH	ACGIH TLV-TWA (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	4950 mg/m³

EN (English US) SDS ID: PTG-4024 3/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Dichlorodifluoromethane (R12) (75-71-8)		
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Dichlorotetrafluoroethane (R	1114) (76-14-2)	
ACGIH	ACGIH TLV-TWA (ppm)	1000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	7000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
Nitrogen (7727-37-9)		
ACGIH	Not established	
USA OSHA	Not established	

Exposure controls

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

exposure limits (where available).

: Wear safety glasses when handling cylinders; vapor-proof goggles and a face shield during Eye protection

cylinder changeout or whenever contact with product is possible. Select eye protection in

accordance with OSHA 29 CFR 1910.133.

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. Select per OSHA 29 CFR 1910.132, 1910.136, and 1910.138.

: When workplace conditions warrant respirator use, follow a respiratory protection program that Respiratory protection

meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). 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 (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA). Self contained breathing apparatus (SCBA) or

positive pressure airline with mask are to be used in oxygen-deficient atmospheres.

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

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Gas Color : Colorless

: No data available Odor Odor threshold : No data available : Not applicable. Relative evaporation rate (butyl acetate=1) : No data available Relative evaporation rate (ether=1) : Not applicable. : No data available Melting point Freezing point : No data available : No data available **Boiling point** Flash point : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : No data available Vapor pressure : Not applicable. Relative vapor density at 20 °C : No data available

Relative density : No data available

Solubility : Water: No data available

Log Pow : Not applicable. Log Kow : Not applicable.

EN (English US) SDS ID: PTG-4024 4/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Viscosity, kinematic : Not applicable. Viscosity, dynamic : Not applicable. Explosive properties Not applicable. Oxidizing properties

: None.

Explosion 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

None.

10.4. **Conditions to avoid**

None.

10.5. Incompatible materials

None.

Hazardous decomposition products

None.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

Trichlorofluoromethane (75-69-4)	
LD50 oral rat	> 15000 mg/kg
LC50 inhalation rat (ppm)	26200 ppm/4h
ATE US (gases)	26200.000 ppmV/4h
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	
LC50 inhalation rat (ppm)	52500 ppm/4h
ATE US (gases)	52500.000 ppmV/4h
Dichlorotetrafluoroethane (R114) (76-14-2)	
LC50 inhalation rat (mg/l)	72 lb/h (Exposure time: 30 min)

Skin corrosion/irritation : Not classified

pH: Not applicable.

Serious eye damage/irritation : Not classified

pH: Not applicable.

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

exposure)

Aspiration hazard : Not classified

EN (English US) SDS ID: PTG-4024 5/11



Safety Data Sheet PTG-4024 according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

SECTION 12: Ecological information

2.1	l. Toxici	

Ecology - general : No known ecological damage caused by this product.

Trichlorofluoromethane (75-69-4)	
EC50 Daphnia 1	130 mg/l (Exposure time: 48 h - Species: Daphnia magna)
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	
LC50 fish 1	6240 mg/l (Exposure time: 96 h - Species: Oryzias latipes)
EC50 Daphnia 1	71 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	1250 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

12.2. Persistence and degradability

PTG-4024	
Persistence and degradability	No ecological damage caused by this product.
Oxygen (7782-44-7)	
Persistence and degradability	No ecological damage caused by this product.
Dichlorodifluoromethane (R12) (75-71-8)	
Persistence and degradability	No data available.
Dichlorotetrafluoroethane (R114) (76-14-2)	
Persistence and degradability	No data available.
Nitrogen (7727-37-9)	
Persistence and degradability	No ecological damage caused by this product.

12.3. **Bioaccumulative potential**

PTG-4024	
Log Pow	Not applicable.
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.
Trichlorofluoromethane (75-69-4)	
Log Pow	2.5 (at 25 °C)
Oxygen (7782-44-7)	
Log Pow	Not applicable.
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.
Dichlorodifluoromethane (R12) (75-71-8)	
Log Pow	2.16
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Dichlorotetrafluoroethane (R114) (76-14-2)	
Log Pow	2.82
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Nitrogen (7727-37-9)	
Log Pow	Not applicable.
Log Kow	Not applicable.
Bioaccumulative potential	No ecological damage caused by this product.

12.4. **Mobility in soil**

PTG-4024	
Mobility in soil	No data available.
Oxygen (7782-44-7)	
Mobility in soil	No data available.
Ecology - soil	No ecological damage caused by this product.

EN (English US) SDS ID: PTG-4024 6/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Dichlorodifluoromethane (R12) (75-71-8)	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Dichlorotetrafluoroethane (R114) (76-14-2	
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Nitrogen (7727-37-9)	
Mobility in soil	No data available.
Ecology - soil	No ecological damage caused by this product.

12.5. Other adverse effects

Effect on ozone layer : None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Do not attempt to dispose of residual or unused quantities. Return container to supplier.

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.

Transport hazard class(es) (DOT) : 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 173.115

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

Emergency Response Guide (ERG) Number : 126

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

 Limited quantities (IMDG)
 : 120ml

 EmS-No. (1)
 : F-C

 MFAG-No
 : 620

 EmS-No. (2)
 : S-V

Air transport

UN-No.(IATA) : 1956

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

Class (IATA) : 2

EN (English US) SDS ID: PTG-4024 7/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Instruction "cargo" (ICAO) : 200
Instruction "passenger" (ICAO) : 200

Instruction "passenger" - Limited quantities : FORBIDDEN

(ICAO)

SECTION 15: Regulatory information

15.1. US Federal regulations

Trichlorofluoromethane (75-69-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

Dichlorodifluoromethane (R12) (75-71-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

Dichlorotetrafluoroethane (R114) (76-14-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

15.2. International regulations

CANADA

Trichlorofluoromethane (75-69-4)

Listed on the Canadian DSL (Domestic Substances List)

1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)

Listed on the Canadian DSL (Domestic Substances List)

Oxygen (7782-44-7)

Listed on the Canadian DSL (Domestic Substances List)

Dichlorodifluoromethane (R12) (75-71-8)

Listed on the Canadian DSL (Domestic Substances List)

Dichlorotetrafluoroethane (R114) (76-14-2)

Listed on the Canadian DSL (Domestic Substances List)

Nitrogen (7727-37-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Trichlorofluoromethane (75-69-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

EN (English US) SDS ID: PTG-4024 8/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Dichlorodifluoromethane (R12) (75-71-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Dichlorotetrafluoroethane (R114) (76-14-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on ELINCS (European List of Notified Chemical Substances)

National regulations

Trichlorofluoromethane (75-69-4)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

Dichlorodifluoromethane (R12) (75-71-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

Dichlorotetrafluoroethane (R114) (76-14-2)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

10.0. 00 otate regulations	
PTG-4024()	
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

. !	ır	ıcnı	or	onito	rometnane	(75-69-4)

Tribinor of the content and (10 00 4)									
U.S California -	U.S California -	U.S California -	U.S California - Proposition	No significance risk level					
Proposition 65 -	Proposition 65 -	Proposition 65 -	65 - Reproductive Toxicity -	(NSRL)					
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Male						
_		l .							



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Trichlorofluoromethan	e (75-69-4)			
		Female		
No	No	No	No	
1,1,2-Trichloro-1,2,2-tri	fluoroethane (76-13-1)	'		•
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 significance risk leve (NSRL)
No	No	No	No	
Oxygen (7782-44-7)				1
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 significance risk leve (NSRL)
No	No	No	No	
Chlorodifluoromethane	•			
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 significance risk leve (NSRL)
No	No	No	No	
Dichlorodifluorometha	ne (R12) (75-71-8)			
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 significance risk leve (NSRL)
No	No	No	No	
Dichlorotetrafluoroetha	ane (R114) (76-14-2)			1
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 significance risk leve (NSRL)
No	No	No	No	
Nitrogen (7727-37-9)				I
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 significance risk leve (NSRL)

Trichlorofluoromethane (75-69-4)

- 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

1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)

- 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

Oxygen (7782-44-7)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List

EN (English US) SDS ID: PTG-4024 10/11



Safety Data Sheet PTG-4024

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication. Date of issue: 05/15/2015 Revision date: 10/20/2015

Oxygen (7782-44-7)

U.S. - Pennsylvania - RTK (Right to Know) List

Dichlorodifluoromethane (R12) (75-71-8)

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

Dichlorotetrafluoroethane (R114) (76-14-2)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List

Nitrogen (7727-37-9)

- 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

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.

Praxair SDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products, contact your Praxair sales representative, local distributor, or supplier, or download from www.praxair.com. If you have questions regarding Praxair SDSs, would like the document number and date of the latest SDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center (Phone: 1-800-PRAXAIR/1-800-772-9247; Address: Praxair Call Center, Praxair, Inc., P.O. Box 44, Tonawanda, NY 14151-0044).

PRAXAIR and the Flowing Airstream design are trademarks or registered trademarks of Praxair Technology, Inc. in the United States and/or other countries.

MSA Part Numbers: 806905, 803499, 812785, 710880, 804870, 813368, 813369, 804866, 812823, 710878, 806906, 804868, 812786, 710876

SDS US (GHS HazCom 2012) - Praxair

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.