

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015) Date of issue: 31/05/2018

Version: 1.0

SECTION 1: Identification		
1.1. Product identifier		
Product form	: Mixtures	
Trade name	: LASERMIX 4, LM4	
Other means of identification	: Carbon Monoxide (4%), Carbon Dioxide (8%), Helium (28%) in Nitrogen	
1.2. Recommended use and restri	ctions on use	
Recommended uses and restrictions 1.3. Supplier	For use in laser operations.	
RS Josef Group 201 Basaltic Rd. Concord		
Canada L4K 1G4		
T 416-658-1212		
www.josefgases.com		
1.4. Emergency telephone numbe		
Emergency Number	1-613-996-6666 CANUTEC Call emergency number 24 hours a day.	
	For routine information, contact your supplier or RS Josef Group sale representative.	es
SECTION 2: Hazard identification	on	
2.1. Classification of the substance		
Classification (GHS-CA)		
Gases under pressure : Compressed gas	H280	
Reproductive toxicity, Category 1A	H360	
Specific target organ toxicity - Repeated	exposure, Category 1 H372	
Full text of H statements : see section 16		
2.2. GHS Label elements, includi	ng precautionary statements	
GHS-CA labelling		
Hazard pictograms (GHS-CA)		
	GHS04 GHS08	
Signal word (GHS-CA)	: Danger	
Hazard statements (GHS-CA)	: H280 - Contains gas under pressure; may explode if heated	
	H360 - May damage fertility or the unborn child	
	H372 - Causes damage to organs through prolonged or repeated exposure CGA-HG03 - May increase respiration and heart rate	
	CGA-HG10 - Asphyxiating even with adequate oxygen	
Precautionary statements (GHS-CA)	: P501 - Dispose of contents/container in accordance with	
	local/regional/national/international regulations.	
	P403 - Store in a well-ventilated place P405 - Store locked up	
	P260 - Do not breathe gas	
	P201 - Obtain special instructions before use	
	P202 - Do not handle until all safety precautions have been read and understood P308+P313 - IF exposed or concerned: Get medical advice/attention	
	P280 - Wear eye protection, face protection, protective clothing, protective gloves	
	P264 - Wash hands, forearms and face thoroughly after handling	
	P271 - Use only outdoors or in a well-ventilated area	r
	P.304+P.340 - IF INHALED' Bernove berson to tresh air and keen comtoriania tor breathing	
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C/125 °F CGA	
	CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C/125 °F CGA PG05 - Use a back flow preventive device in the piping	
	CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C/125 °F CGA PG05 - Use a back flow preventive device in the piping CGA-PG06 - Close valve after each use and when empty CGA-	
	CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52 °C/125 °F CGA PG05 - Use a back flow preventive device in the piping	

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CGA-PG21 - Open valve slowly

2.3. Other hazards

: This product contains a chemical asphyxiant.

Other hazards not contributing to the classification

2.4. Unknown acute toxicity (GHS-CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS-CA)
Helium (Compressed)	Helium, compressed / Helium gas	(CAS-No.) 7440-59-7	28	Press. Gas (Comp.), H280
Carbon Dioxide	Carbon Dioxide, CO ₂	(CAS-No.) 124-38-9	8	Press. Gas (Liq.), H280
Carbon monoxide	Carbon monoxide, compressed / Compressed carbon monoxide / Carbon oxide (CO) / Carbon(II) oxide / Carbon oxide	(CAS-No.) 630-08-0	4	Flam. Gas 1, H220 Press. Gas (Comp.), H280 Acute Tox. 3 (Inhalation:gas), H331 Repr. 1A, H360 STOT RE 1, H372
Nitrogen	Nitrogen Gas/NITROGEN/Nitrogen Compressed	(CAS-No.) 7727-37-9	>= 0.001	Press. Gas (Comp.), H280

Full text of hazard classes and H-statements : see section 16

SECT	SECTION 4: First-aid measures		
4.1.	Description of first aid measures		
First-aid	measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration with bag and mask if breathing stopped. Get immediate medical	

	advice/attention.
First-aid measures after skin contact	: Adverse effects not expected from this product.
First-aid measures after eye contact	: Adverse effects not expected from this product.
First-aid measures after ingestion	: Ingestion is not considered a potential route of exposure.
4.2. Most important symptoms and effect	ts (acute and delayed)
Symptoms/effects after inhalation	: Asphyxiating even with adequate oxygen. May increase respiration and heart rate.
Symptoms/effects after skin contact	: Adverse effects not expected from this product.
Symptoms/effects after eye contact	: Adverse effects not expected from this product.
Symptoms/effects after ingestion	: Ingestion is not considered a potential route of exposure.
Symptoms/effects upon intravenous administration	: Not known.
Chronic symptoms	: May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.
4.3. Immediate medical attention and	special treatment, if necessary
Other medical advice or treatment	: If you feel unwell, seek medical advice. If breathing is difficult, give oxygen. Obtain medical

: If you feel unwell, seek medical advice. If breathing is difficult, give oxygen. Obtain medical attention if breathing difficulty persists.

SECT	ION 5: Fire-fighting measures	
5.1.	Suitable extinguishing media	
Suitable	e extinguishing media	: Use extinguishing media appropriate for surrounding fire.
5.2.	Unsuitable extinguishing media	
Unsuita	ble extinguishing media	: Do not use water jet to extinguish.
5.3.	Specific hazards arising from the h	azardous product
Fire haz	zard	: The product is not flammable.
Explosi	on hazard	: Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardo	ous combustion products	: None



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5.4.	Special protective equipment and pr	ecautions for fire-fighters
Firefightir	ng instructions	: In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Exposure to fire may cause containers to rupture/explode. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.
Protection	n during firefighting	: Standard protective clothing and equipment (e.g, Self Contained Breathing Apparatus) for fire fighters. Do not enter fire area without proper protective equipment, including respiratory protection.
SECTIO	ON 6: Accidental release meas	ures
6.1.	Personal precautions, protective equ	Jipment and emergency procedures
General r	neasures	: Ensure adequate ventilation.
	Precautions, Protective Equipment rgency Procedures	: EVACUATE ALL PERSONNEL FROM AFFECTED AREA. Use appropriate protective equipment. If leak is on user's equipment, be certain to purge piping before attempting repairs. If leak is on a container or container valve contact RS Josef Group.
6.2.	Methods and materials for containm	ent and cleaning up
For conta	inment	: Try to stop release if without risk.
Methods	for cleaning up	: Dispose of contents/container in accordance with local/regional/national/international regulations.
6.3.	Reference to other sections	
For furthe	er information refer to section 8: "Exposu	re controls/personal protection"
SECTIO	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Precautio	ns for safe handling	: Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.
Hygiene i	measures	: Do not eat, drink or smoke when using this product.
Additiona	I hazards when processed	: Pressurized container: Do not pierce or burn, even after use. Use only with equipment rated for cylinder pressure. Close valve after each use and when empty.
7.2.	Conditions for safe storage, including	ig any incompatibilities
Technica	measures	: Comply with applicable regulations.
Storage o	conditions	: Do not expose to temperatures exceeding 52 °C/ 125 °F. Keep container closed when not in use. Protect cylinders from physical damage; do not drag, roll, slide or drop. Store in well ventilated area. Store locked up.
Incompat	ible products	: None known.
Incompat	ible materials	: None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Carbon Dioxide (124-38-9)			
USA - ACGIH	ACGIH TWA (ppm)	5000 ppm	
USA - ACGIH	ACGIH STEL (ppm)	30000 ppm	
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	9000 mg/m ³	
USA - OSHA	OSHA PEL (TWA) (ppm)	5000 ppm	
Canada (Quebec)	VECD (mg/m ³)	54000 mg/m ³	
Canada (Quebec)	VECD (ppm)	30000 ppm	
Canada (Quebec)	VEMP (mg/m ³)	9000 mg/m ³	
Canada (Quebec)	VEMP (ppm)	5000 ppm	
Alberta	OEL STEL (mg/m ³)	54000 mg/m ³	
Alberta	OEL STEL (ppm)	30000 ppm	
Alberta	OEL TWA (mg/m ³)	9000 mg/m ³	
Alberta	OEL TWA (ppm)	5000 ppm	
British Columbia	OEL STEL (ppm)	15000 ppm	
British Columbia	OEL TWA (ppm)	5000 ppm	
Manitoba	OEL STEL (ppm)	30000 ppm	
Manitoba	OEL TWA (ppm)	5000 ppm	



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Carbon Dioxide (124-38-9)		
New Brunswick	OEL STEL (mg/m ³)	54000 mg/m ³
New Brunswick	OEL STEL (ppm)	30000 ppm
New Brunswick	OEL TWA (mg/m ³)	9000 mg/m ³
New Brunswick	OEL TWA (ppm)	5000 ppm
New Foundland & Labrador	OEL STEL (ppm)	30000 ppm
New Foundland & Labrador	OEL TWA (ppm)	5000 ppm
Nova Scotia	OEL STEL (ppm)	30000 ppm
Nova Scotia	OEL TWA (ppm)	5000 ppm
Nunavut	OEL STEL (ppm)	30000 ppm
Nunavut	OEL TWA (ppm)	5000 ppm
Northwest Territories	OEL STEL (ppm)	30000 ppm
Northwest Territories	OEL TWA (ppm)	5000 ppm
Ontario	OEL STEL (ppm)	30000 ppm
Ontario	OEL TWA (ppm)	5000 ppm
Prince Edward Island	OEL STEL (ppm)	30000 ppm
Prince Edward Island	OEL TWA (ppm)	5000 ppm
Saskatchewan	OEL STEL (ppm)	30000 ppm
Saskatchewan	OEL TWA (ppm)	5000 ppm
Yukon	OEL STEL (mg/m ³)	27000 mg/m ³
Yukon	OEL STEL (ppm)	15000 ppm
Yukon	OEL TWA (mg/m ³)	9000 mg/m ³
Yukon	OEL TWA (ppm)	5000 ppm
Carbon monoxide (630-08-0)		
USA - ACGIH	ACGIH TWA (ppm)	25 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	55 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	50 ppm
Canada (Quebec)	VECD (mg/m ³)	230 mg/m ³
Canada (Quebec)	VECD (ppm)	200 ppm
Canada (Quebec) Canada (Quebec)	VEMP (mg/m ³) VEMP (ppm)	40 mg/m ³ 35 ppm
Alberta	OEL TWA (mg/m ³)	29 mg/m ³
Alberta	OEL TWA (ppm)	25 ppm
British Columbia	OEL STEL (ppm)	100 ppm
British Columbia	OEL TWA (ppm)	25 ppm
Manitoba	OEL TWA (ppm)	25 ppm
New Brunswick	OEL TWA (mg/m ³)	29 mg/m ³
New Brunswick	OEL TWA (ppm)	25 ppm
New Foundland & Labrador	OEL TWA (ppm)	25 ppm
Nova Scotia	OEL TWA (ppm)	25 ppm
Nunavut	OEL STEL (ppm)	190 ppm
	OEL TWA (ppm)	
Nunavut		25 ppm
Northwest Territories	OEL STEL (ppm)	190 ppm
Northwest Territories	OEL TWA (ppm)	25 ppm
Ontario	OEL TWA (ppm)	25 ppm
Prince Edward Island	OEL TWA (ppm)	25 ppm
Saskatchewan	OEL STEL (ppm)	190 ppm
Saskatchewan	OEL TWA (ppm)	25 ppm
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Carbon monoxide (630-08-0)		
Yukon	OEL STEL (mg/m ³)	440 mg/m ³
Yukon	OEL STEL (ppm)	400 ppm
Yukon	OEL TWA (mg/m ³)	55 mg/m³
Yukon	OEL TWA (ppm)	50 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls

: Ensure exposure is below occupational exposure limits (where available). Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Consider the use of a work permit system e.g. for maintenance activities. Alarm detectors should be used when toxic gases may be released.

Environmental exposure controls

cosure controls : Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Safety shoes.

Hand protection:

Wear working gloves when handling gas containers.

Eye protection:

Wear safety glasses with side shields.

Skin and body protection:

Wear suitable protective clothing, e.g. lab coats, coveralls or flame resistant clothing.

Respiratory protection:

None necessary during routine operations. See Sections 5 & 6



Thermal hazard protection:

None necessary during routine operations.

Other information:

Wear safety shoes while handling containers.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Gas	
Appearance	: Clear, colorless gas.	
Colour	: Colourless	
Odour	: Odourless	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Relative evaporation rate (ether=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: Not applicable (non-flammable gas)	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: See Section 2.1 and 2.2	



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Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: No data available
Solubility	: Water: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not applicable (non-flammable gas).
Oxidising properties	: None.
Explosive limits	: Not applicable (non-flammable gas)

9.2. Other information No additional information available

SECTION 10: Stability and reactivi	ty
10.1. Reactivity	
Reactivity	: None known.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: None known.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: None known.
Hazardous decomposition products	: Under normal conditions of storage and use hazardous decomposition products should not be produced.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	3
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Carbon Dioxide (124-38-9)	
LC50 inhalation rat (ppm)	820000 ppm/4h
Carbon monoxide (630-08-0)	
LC50 inhalation rat (ppm)	1880 ppm/4h
Helium (Compressed) (7440-59-7)	
LC50 inhalation rat (ppm)	820000 ppm/4h
Nitrogen (7727-37-9)	
LC50 inhalation rat (ppm)	820000 ppm/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTI	ON 12: Ecological information
12.1.	Toxicity
No addit	ional information available
12.2.	Persistence and degradability

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Carbon Dioxide (124-38-9)	All sectorized descences and by this was due.
Persistence and degradability	No ecological damage caused by this product.
Carbon monoxide (630-08-0)	
Persistence and degradability	Will not undergo hydrolysis. Not readily biodegradable. Not applicable for inorganic gases.
Helium (Compressed) (7440-59-7)	
Persistence and degradability	No ecological damage caused by this product.
Nitrogen (7727-37-9)	
Persistence and degradability	No ecological damage caused by this product.
12.3. Bioaccumulative potential	
Corbon Diovido (124.29.0)	
Carbon Dioxide (124-38-9) BCF fish 1	(no bioaccumulation)
Log Pow	0.83
Bioaccumulative potential	No ecological damage caused by this product.
· · · ·	
Carbon monoxide (630-08-0) Log Pow	1.78
Bioaccumulative potential	Not expected to bioaccumulate due to the low log Kow (log Kow < 4). Refer to section 9.
Helium (Compressed) (7440-59-7)	Net applicable for ingranic gases
Log Pow Biogeoumulative potential	Not applicable for inorganic gases. No ecological damage caused by this product.
Bioaccumulative potential	
Nitrogen (7727-37-9)	
Log Pow	Not applicable for inorganic gases.
Bioaccumulative potential	No ecological damage caused by this product.
12.4. Mobility in soil	
Carbon Dioxide (124-38-9)	
Log Pow	0.83
Ecology - soil	No ecological damage caused by this product.
Carbon monoxide (630-08-0)	
Log Pow	1.78
Ecology - soil	Because of its high volatility, the product is unlikely to cause ground or water pollution.
Helium (Compressed) (7440-59-7)	
Log Pow	Not applicable for inorganic gases.
Ecology - soil	No ecological damage caused by this product.
Nitrogen (7727-37-9)	
Nitrogen (7727-37-9)	
Log Pow	Not applicable for inorganic gases.
Log Pow Ecology - soil	
Log Pow Ecology - soil 12.5. Other adverse effects	Not applicable for inorganic gases. No ecological damage caused by this product.
Log Pow Ecology - soil	Not applicable for inorganic gases.
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product.
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product.
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. s : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded.
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description In accordance with TDG	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description In accordance with TDG	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description In accordance with TDG Transportation of Dangerous Goods	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods.
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description In accordance with TDG Transportation of Dangerous Goods UN-No. (TDG)	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods. : UN1956
Log Pow Ecology - soil 12.5. Other adverse effects Effect on ozone layer SECTION 13: Disposal consideration 13.1. Disposal methods Waste treatment methods Product/Packaging disposal recommendations SECTION 14: Transport information 14.1. Basic shipping description In accordance with TDG Transportation of Dangerous Goods	Not applicable for inorganic gases. No ecological damage caused by this product. : No known effects from this product. S : Contact supplier if guidance is required. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. : Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods.



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shown, in parentheses, on the shipping document following the shipping name in accordance with clause 35(1)(c)((i)(4) of Part 3 (Documentation). The t echnical name must also be sho in parentheses, on a small means of containment van a tag following the shipping name in accordance with subsection (1), the technical name for the following dangerous goods is not requiree be shown on a shipping document or an amall means of containment van Canadian law domestic transport or an international convention for international transport prohibits the disclosure of the technical name (a)UNT844, ALKALOID SALTS, SOLD, N.O.S, or ALKALOID SALTS, SOLD, N.O.S; (b)UN3440, ALKALOID SALTS, SOLD, N.O.S; (c)UN3446, ALKALOID SALTS, LUDID, TOXIC, N.O.S; (c)UN3446, ALKALOID SALTS, SOLD, N.O.S; (c)UN3446, ALKALOID SALTS, ALKALOID SALTS, ALKALOID SALTS, SOLD, N.O.S; (c)UN3446, ALKALOID SALTS, ALKALOID SALTS, ALKALOID SALTS, SOLD, N.O.S; (c)UN3446, ALKALOID SALTS, A		
TDG Special Provisions : 16 - (1) The technical name of at least one of the most dan gerous substances that predominantly contributes to the <i>hazard or hazards</i> posed by the dragerous goods must be service that substances in the dragerous position of the dragerous goods in must be in parentheses, on a small means of containment of the chick and must be service that subsections 4.11 (2) and (3) of Part 4 (Dangerous Goods Starly Marks). Concentrations (3) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	Proper Shipping Name	: Compressed gas, n.o.s.
predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Satety Marks), (2) Despite subsection (1), the technical name must also be show document following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Satety Marks), (2) Despite subsection (1), the technical name (3) of Part 4 (Dangerous Goods Satety Marks), (2) Despite subsection (1), the technical name (3) of Part 4 (Dangerous Goods Satety Marks), (2) Despite subsection (1), the technical name, (3) of Part 4 (Dangerous Goods Satety Marks), (2) Despite subsection (1), the technical name, (3) of Part 4 (Dangerous Goods Const, (2), (2) AtAKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S. (2), (N3740, ALKALOIDS, LIQUID, N.O.S. (2), (N3740, ALKALOIDS, LIQUID, N.O.S. (2), (N3740, ALKALOIDS, LIQUID, N.O.S. (2), (2) In Canada is the Foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the Foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the Foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the foods of Drugs Act, (3) Deptie subsection (1), the technical name (a) in Canada is the foods of Drugs Act, (3) Dept	Hazard labels (TDG)	2.2 - Non-flammable, non-toxic gases
DOT NA no.: UN1956UN-No.(DOT): 1956DOT Symbols: G - Identifies PSN requiring a technical nameTransport Document Description: UN1956 Compressed gas, n.o.s., 2.2Proper Shipping Name (DOT): Compressed gas, n.o.s.	Explosive Limit and Limited Quantity Index Excepted quantities (TDG) Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	predominantly contributes to the hazard or hazards posed b y the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The t echnical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of c ontainment when Canadian law for domestic transport or an international convention for interna tional transport prohibits the disclosure of the technical name: (a)UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S.; (b)UN1851, MEDICINE, LIQUID, TOXIC, N.O.S.; (c)UN3140, ALKALOID SALTS, LIQUID, N.O.S.; (b)UN1851, MEDICINE, LIQUID, N.O.S.; (c)UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.; or (e)UN3249, MED ICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act". (3) Despit e subsection (1), the technical name for the following dangerous goods is not required to be sho wn on a small means of containment: (a)UN12814, INFECTIOUS SUBSTANCE, AFF ECTING HUMANS; or (b)UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS. SOR/2014-306 148 - (1) Part 5 (Means of Containment) does not apply to radiation detectors that contain these dangerous goods in non-refillable pressure receptacle is less than 12 L; (c)each receptacle is less than 5 000 KPa; (b)the capacity of each receptacle is less than 12 L; (c)each receptacle is not fitted with a relief device, or (ii) at least 3 time s the working pressure, when the receptacle is not fitted with a relief device, or (ii) at least 4 times the working pressure, when the receptacle is not goots in non-refillable pressure receptacles and that are included in equipment, if (a)the conditions set out in paragraphs (1)(a) to (e) are met; and (b)the equipment
UN-No.(DOT): 1956DOT Symbols: G - Identifies PSN requiring a technical nameTransport Document Description: UN1956 Compressed gas, n.o.s., 2.2Proper Shipping Name (DOT): Compressed gas, n.o.s.	Department of Transport	
Proper Shipping Name (DOT) : Compressed gas, n.o.s.	UN-No.(DOT)	: 1956
Contains Statement Heid Selection (DOT)		
Class (DOT): 2.2 - Class 2.2 - Non-flammable compressed gas 49 CFR 1 73.115Division (DOT): 2.2		



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according to the Hazardous Products Regulation (February 11, 2015)

Hazard labels (DOT)	: 2.2 - Non-flammable gas
Dangerous for the environment	: No
DOT Packaging Exceptions (49 CFR 173.xxx)	: 306;307
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 302;305
DOT Packaging Bulk (49 CFR 173.xxx)	: 314;315
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 150 kg
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under dec k" on a cargo vessel andnoa passenger vessel.

Other information

: No supplementary information available.

14.3. Air and sea transport	
IMDG	
UN-No. (IMDG) Proper Shipping Name (IMDG) Transport Document Description (IMDG) Class (IMDG)	 : 1956 : Compressed gas, n.o.s. : UN 1956 Compressed gas, n.o.s., 2.3 (2.1) : 2.2 - Non-flammable, non-toxic gases
IATA UN-No. (IATA) Proper Shipping Name (IATA) Transport Document Description (IATA) Class (IATA)	: 1956 : Compressed gas, n.o.s. : UN 1956 Compressed gas, n.o.s., 2.2 (2.1) : 2.2 - Gases : Non-flammable, non-toxic

SECTION 15: Regulatory information

15.1. National regulations	
Carbon Dioxide (124-38-9)	
isted on the Canadian DSL (Domestic Substances List)	
Carbon monoxide (630-08-0)	
isted on the Canadian DSL (Domestic Substances List)	
Helium (Compressed) (7440-59-7)	
isted on the Canadian DSL (Domestic Substances List)	
Nitrogen (7727-37-9)	
isted on the Canadian DSL (Domestic Substances List)	
5.2. International regulations	

Carbon Dioxide (124-38-9) Listed on the AICS (Australian Inventory of Chem ical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals Li st) Listed on NZIOC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemi cals and Chemical Substances) Listed on the United States TSCA (Toxic Substan ces Control Act) inventory Listed on Turkish inventory of chemical



Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Carbon monoxide (630	-08-0)
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 EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) 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) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on INSQ (Mexican National Inventory of Chemical Substances)	
Helium (Compressed)	(7440-59-7)
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 EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) 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) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on INSQ (Mexican National Inventory of Chemical Substances)	
Nitrogen (7727-37-9)	
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 EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) 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) Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on INSQ (Mexican National Inventory of Chemical Substances)	
SECTION 16: Other	information
Date of issue	31/05/2018

Date of issue

: 31/05/2018

Full text of H-statements:

H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
H331	Toxic if inhaled
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

SDS Canada (GHS)

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