

## CARBON MONOXIDE (13C, 99%) (<5% 18O)

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 17/12/2010

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Supersedes: 12/04/2013

Version: 4.0

CLM-189-5

SECTION 4. Identit	fightion of the substance/mixture and of the company/undertaking
1.1. Product identi	fication of the substance/mixture and of the company/undertaking
Product form	: Substance
Substance name	: CARBON MONOXIDE (13C, 99%) (<5% 18O)
EC index no	: 006-001-00-2
EC no	: 211-128-3
CAS No	: 1641-69-6
Product code	: CLM-189-5
Formula	: *CO
1.2. Relevant iden	tified uses of the substance or mixture and uses advised against
1.2.1. Relevant iden	itified uses
No additional information	n available
1.2.2. Uses advised No additional information	
	supplier of the safety data sheet
Cambridge Isotope Labo 50 Frontage Road Andover, MA 01810 USA	ratories, Inc.
USA: 1-800-322-1174	Int: 1-978-749-8000 www.isotope.com
Emergency te	elephone number
Emergency numbers:	
Chemtrec: 1-800-424-93 International: 1-703-741	
SECTION 2: Hazar	ds identification
2.1. Classification	of the substance or mixture
Classification accordin	ng to Regulation (EC) No. 1272/2008 [CLP]
Flam. Gas 1	H220
Compressed gas	H280
Acute Tox. 3 (Inhalation)	H331
Repr. 1A	H360FD
STOT RE 1	H372
Full text of H-phrases: se	ee section 16

#### Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.1; R60 Repr.Cat.1; R61 F+; R12 T; R48/23 R5 Full text of R-phrases: see section 16

#### **Classification (GHS-US)**

Flam. Gas 1	H220
Compressed gas	H280
Acute Tox. 3 (Inhalation)	H331
Repr. 1A	H360
STOT RE 1	H372

Adverse physicochemical, human health and environmental effects

Blood, Nerves.

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2.2. Label elements	
Labeling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS04 GHS06 GHS08
Signal word (CLP)	: Danger
Hazard statements (CLP)	: H220 - Extremely flammable gas
	H280 - Contains gas under pressure; may explode if heated H331 - Toxic if inhaled
	H360FD - May damage fertility. May damage the unborn child
	H372 - Causes damage to organs (blood) through prolonged or repeated exposure
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
	P260 - Do not breathe dust, fume, gas, mist, spray, vapors
	P264 - Wash Both hands thoroughly after handling P270 - Do no eat, drink or smoke when using this product
	P270 - Do no eat, drink of smoke when using this product P271 - Use only outdoors or in a well-ventilated area
	P280 - Wear protective clothing, protective gloves
	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P308+P313 - IF exposed or concerned: Get medical advice/attention
GHS-US labeling	
GIIO-OG labeling	
Hazard pictograms (GHS-US)	
	GHS02 GHS04 GHS06 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H220 - Extremely flammable gas
	H280 - Contains gas under pressure; may explode if heated
	H331 - Toxic if inhaled H360 - (Dermal, Inhalation, oral)
	H372 - Causes damage to organs (blood) through prolonged or repeated exposure (Dermal,
	Inhalation, oral)
Precautionary statements (GHS-US)	<ul> <li>P201 - Obtain special instructions before use</li> <li>P202 - Do not handle until all safety precautions have been read and understood</li> </ul>
	P210 - Keep away from heat, hot surfaces, open flames, sparks No smoking
	P260 - Do not breathe dust, fume, gas, mist, spray, vapors
	P261 - Avoid breathing dust, fume, gas, mist, spray, vapors P264 - Wash Both hands thoroughly after handling
	P270 - Do no eat, drink or smoke when using this product
	P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective clothing, protective gloves
	P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortabl
	for breathing P308+P313 - IF exposed or concerned: Get medical advice/attention
	P304F313 - IT exposed of concerned. Get medical advice/attention P311 - Call a POISON CENTER or doctor/physician
	P314 - Get medical advice and attention if you feel unwell
	P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely
	P381 - In case of leaking gas fire, eliminate all ignition sources if safe to do so
	P403 - Store in a well-ventilated place
	P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up
	P410+P403 - Protect from sunlight. Store in a well-ventilated place
	P501 - Dispose of contents/container to Comply with applicable regulations.

No additional information available

#### **SECTION 3: Composition/information on ingredients**

06/08/2015

Safety Data Sheet according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Directive 67/548/EEC
CARBON MONOXIDE (13C, 99%) (<5% 18O) (Main constituent)	(CAS No) 1641-69-6 (EC no) 211-128-3 (EC index no) 006-001-00-2	100	Repr.Cat.1; R60 Repr.Cat.1; R61 F+; R12 T; R48/23 R5
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CARBON MONOXIDE (13C, 99%) (<5% 18O) (Main constituent)	(CAS No) 1641-69-6 (EC no) 211-128-3 (EC index no) 006-001-00-2	100	Flam. Gas 1, H220 Compressed gas, H280 Acute Tox. 3 (Inhalation), H331 Repr. 1A, H360FD STOT RE 1, H372

Full text of R-, H- and EUH-phrases: see section 16

Name	Product identifier	%	Classification (GHS-US)
CARBON MONOXIDE (13C, 99%) (<5% 18O) (Main constituent)	(CAS No) 1641-69-6	100	Flam. Gas 1, H220 Compressed gas, H280 Acute Tox. 3 (Inhalation), H331 Repr. 1A, H360 STOT RE 1, H372

Full text of H-phrases: see section 16

3.2.	Mixtures	S											
Not appl	licable												

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2. Most important symptoms and effe	ects, both acute and delayed
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/injuries after eye contact	: May cause eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate medica	al attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
<ul><li>suitable extinguishing media</li><li>5.2. Special hazards arising from the su</li></ul>	
5.2. Special hazards arising from the su	<ul> <li><b>ubstance or mixture</b></li> <li>Flammable in the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat,</li> </ul>
5.2. Special hazards arising from the su Fire hazard	<ul> <li>In the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> </ul>
5.2. Special hazards arising from the su Fire hazard Reactivity	<ul> <li>In the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> </ul>
5.2.       Special hazards arising from the surface         Fire hazard         Reactivity         5.3.       Advice for firefighters	<ul> <li>In the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> <li>Not available.</li> </ul>
<ul> <li>5.2. Special hazards arising from the surface of the second sec</li></ul>	<ul> <li>Ibstance or mixture</li> <li>Flammable in the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> <li>Not available.</li> <li>Use water spray to cool unopened containers.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>
<ul> <li>5.2. Special hazards arising from the surface of the second sec</li></ul>	<ul> <li>Ibstance or mixture</li> <li>Flammable in the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> <li>Not available.</li> <li>Use water spray to cool unopened containers.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>
<ul> <li>5.2. Special hazards arising from the surface of the second sec</li></ul>	<ul> <li>Hammable in the presence of an oxidizing gas (eg air), a source of ignition, and when the concentration of the gas is between the lower and upper explosive limits. Keep away from heat, sparks, open flames, hot surfaces, oxidizing gases. No smoking.</li> <li>Not available.</li> <li>Use water spray to cool unopened containers.</li> <li>Do not enter fire area without proper protective equipment, including respiratory protection.</li> </ul>

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6.1.2. For emergency responders						
No additional information available						
6.2. Environmental precautions						
Prevent further leakage or spillage if safe to de	o so. Do not let product enter drains.					
6.3. Methods and material for contain	ment and cleaning up					
For containment	: Clean up promptly by sweeping or vacuum.					
6.4. Reference to other sections No additional information available						
SECTION 7: Handling and storage						
7.1. Precautions for safe handling	A set discussion of which is an electron. As an id in both the set of some source is in the second second second					
Additional hazards when processed	: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.					
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before					
	breaks and at the end of workday.					
7.2. Conditions for safe storage, inclu	ding any incompatibilities					
Technical measures	: Store tightly closed in a dry and cool place.					
Storage conditions	: Store at room temperature away from light and moisture.					
7.3. Specific end use(s)						
No additional information available						
SECTION 8: Exposure controls/pe	rsonal protection					
8.1. Control parameters						
CARBON MONOXIDE (13C, 99%) (<5% 18						
Italy - Portugal - USA ACGIH ACGIH TWA USA OSHA OSHA PEL	A (ppm)         25.000000000 ppm           (TWA) (ppm)         50.000000000 ppm					
USA USHA						
8.2. Exposure controls						
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.					
Eye protection	: Wear safety glasses with side shields (or goggles) and a face shield.					
Skin and body protection	: Wear complete suit protecting against chemicals according to concentration and amount of					
Respiratory protection	substance. : When appropriate, use NIOSH/CEN approved respirator.					
SECTION 9: Physical and chemica						
9.1. Information on basic physical and						
Physical state	: Gas					
Appearance	: Compressed Gas.					
Molecular mass	: 29.0					
Color	: No data available.					
Odor Odor threshold	: No data available.					
Odor threshold	: No data available					
pH Relative evaporation rate (butyl acetate=1)	: No data available : No data available					
Relative evaporation rate (butyl acetate=1)	: -205 °C (- 337 °F) - lit					
Melting point Freezing point	: -205 C (- 337 F) - III : No data available					
Boiling point	: -191.5 °C (- 312.7 °F) - lit : No data available					
Flash point Self ignition temperature	: 609 °C (1,128 °F)					
•	: No data available					
Decomposition temperature	: No data available					
Flammability (solid, gas)	: No data available					
Vapor pressure Relative vapor density at 20 °C	: $0.97 - (Air = 1.0)$					
Relative density	$\frac{1}{1000} = \frac{1}{1000}$					

Relative density

: No data available

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Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 12.5 - 74 % (V)

#### 9.2. **Other information**

9.2. Other information								
No additional information available								
SECTION 10: Stability and reactivity								
10.1. Reactivity								
Not available.	Not available.							
10.2. Chemical stability								
Stable if stored under recommended conditions.								
10.3. Possibility of hazardous reactions								
No additional information available								
10.4. Conditions to avoid								
Heat, flames and sparks. Extremes of temperature	and direct sunlight.							
10.5. Incompatible materials								
Sodium/sodium oxides, Potassium, Strong oxidizir	ng agents.							
10.6. Hazardous decomposition products								
Formed nder fire conditions: Carbon oxides.								
SECTION 11: Toxicological information	on							
11.1. Information on toxicological effects								
Acute toxicity	: Toxic if inhaled.							
CARBON MONOXIDE (13C, 99%) (<5% 180) (	1641-69-6)							
LC50 inhalation rat (ppm)	1807 ppm 4 h							
ATE (gases)	700.000 ppmV/4h							
ATE (vapors)	3.000 mg/l/4h							
ATE (dust, mist)	0.500 mg/l/4h							
Skin corrosion/irritation	: Not classified							
	No data available							
Serious eye damage/irritation	Not classified							
Respiratory or skin sensitization	: Not available							
	No data available							
Germ cell mutagenicity	: Not available							
Carcinogenicity	: Not classified							
Reproductive toxicity	: Not available							
Specific target organ toxicity (single exposure)	: Not classified							
	No data available							
Specific target organ toxicity (repeated	: Causes damage to organs (blood) through prolonged or repeated exposure.							
exposure)	Inhalation - Causes damage to organs through prolonged or repeated exposure.							
Aspiration hazard	: Not classified							
Potential Adverse human health effects and symptoms	: Blood disorders.							
	: May be harmful if inhaled. May cause respiratory tract irritation.							
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.							
Symptoms/injuries after eye contact	: May cause eye irritation.							
Symptoms/injuries after ingestion	: May be harmful if swallowed.							

Safety Data Sheet according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTON 12: Ecological information  12. Toxicity No additional information available  12. Persistence and degradability  12. Resistence and degradability  13. Resistence and degradability  14. Resistence and degradability  14. Resistence and degradability  14. Resistence and deg		g to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations							
No additional information available          12.2. Persistence and degradability       Not available.         12.3. Bioaccumulative potential       Not available.         CARBON MONOXIDE (13C, 99%) (c5% 180) (1641-69-6)       Edited Second Markov potential         CARBON MONOXIDE (13C, 99%) (c5% 180) (1641-69-6)       Edited Second Markov potential         CARBON MONOXIDE (13C, 99%) (c5% 180) (1641-69-6)       Edited Second Markov potential         Not available.       Instantial (1641-69-6)         Ecology - soil       Not available.         12.5. Other adverse effects       Instantials         Visit adverse effects       Instantials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 13: Disposal considerations       Instantials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 14: Transport information       Instantials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 14: Transport information       Instantial is postenous ges 49 CFR 173.115         14.1. UN number       Instantial is postenous ges 49 CFR 173.115         UP roper shipping name       I Carbon menoxide, compressed         Degating in blick (40 CFR 173.200)       Instantial is postenous by inhilation (see 171.8 d this subchapter) in Hazard Zone D (see 171.116() d this subchapter) in Hazard Zone D (see 171.11	<b>SECTION 12: Ecological information</b>								
12.2       Persistence and degradability       Not available.         23.3       Bioaccumulative potential       Intravailable.         12.4.3       Bioaccumulative potential       Not available.         12.4.4       Mobility in soil       Intravailable.         12.5.       Results of PBT and vPvB assessment       Not available.         12.6.4       Mobility in soil       Intravailable.         12.6.4       Mobility in soil       Intravailable.         12.6.       Other adverse effects       Intravailable.         12.6.4       Mobility in soil       Intravailable.         12.6.4       Mobility in soil       Intravailable.         12.6.4       Motorese effects       Intravailable.         12.6       Other adverse effects       Intravailable.         13.1.4       Waste materials should be disposed of under conditions which meet Federal, State, and Local control regulations.         SECTION 142 Transport information       Intravailable.         14.1       UN number       Intravailable.         15.2       Other potening in soil optication (IOO	12.1. Toxicity								
CARBON MONOXIDE (132, 999) (-5% 180) (1641-69-6)           Persistence and degradability         Not available.           123. Bioaccumulative potential         Not available.           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Booccumulative potential           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Booccumulative potential           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           Carbon Monoxide (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           Carbon Monoxide (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           125. Results of PBT and VPVB assessment         Not available.           No additional information available         Corbor adverse effects           126. Other adverse effects         : Not available.           SECTION 132 Disposal considerations         State materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.           SECTION 142 Transport information         In accordance with ADR / RID / JADN / IMDG / ICAO / IATA           14.1 UN number         UN1016           14.2 UN proper shipping name         : Carbon monoxide, compressed           DOT Proper Shipping Name         : 2.3 - Poisonous gas 49 CFR 173.115           Casadin         : 2.3 - Poisonous by inhabition (see 171.8 of this subchapter) in Hazard Zone D (see provisions (40 CFR 173.xxx)	No additional information available								
CARBON MONOXIDE (132, 999) (-5% 180) (1641-69-6)           Persistence and degradability         Not available.           123. Bioaccumulative potential         Not available.           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Booccumulative potential           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Booccumulative potential           CARBON MONOXIDE (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           Carbon Monoxide (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           Carbon Monoxide (132, 99%) (-5% 180) (1641-69-6)         Ecology - soil           125. Results of PBT and VPVB assessment         Not available.           No additional information available         Corbor adverse effects           126. Other adverse effects         : Not available.           SECTION 132 Disposal considerations         State materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.           SECTION 142 Transport information         In accordance with ADR / RID / JADN / IMDG / ICAO / IATA           14.1 UN number         UN1016           14.2 UN proper shipping name         : Carbon monoxide, compressed           DOT Proper Shipping Name         : 2.3 - Poisonous gas 49 CFR 173.115           Casadin         : 2.3 - Poisonous by inhabition (see 171.8 of this subchapter) in Hazard Zone D (see provisions (40 CFR 173.xxx)									
Persistence and degradability       Not available.         12.3.       Bioaccumulative potential         CARBON MONXDE (130, 99%) (c5% 180 / (1641-69-6)         Bioaccumulative potential       Not available.         12.4.       Mobility in soil         CARBON MONXDE (130, 99%) (c5% 180 / (1641-69-6)         Ecology - soil       Not available.         12.5.       Results of PBT and VPVB assessment         No additional Information available       Not available.         12.6.       Other adverse effects         Other adverse effects       I Not available.         12.6.       Other adverse effects         SECTION 13: Disposal considerations       13.1.         13.1.       Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       IUM on the UNNN. (DOT)         11 accordance with ADR (RID / ADNR / IMDG / ICAO / IATA         14.1.       UN number         UVN-No.(DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Poison gas         2.1 - Flammable gas       : 4 - This materint is poisonous by inhelation (see 171.8 of this subc									
22.3. Bioaccumulative potential       Intervention         CARBON MONOXIDE (13C, 99%) (-5% 18O) (1641-59-6)         Elicaccumulative potential       Not available.         12.4. Mobility in soil       Control (13C, 99%) (-5% 18O) (1641-59-6)         Ecology - soil       Not available.         12.5. Results of PBT and VPVB assessment       Not available.         12.6. Other adverse effects       : Not available.         21.7. Wrate relational information available       : Waste materials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 13: Disposal considerations       : Waste materials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 14: Transport information       In accordance with ADR / RIO / ADNR / IMOG / ICAO / INTA         14.1. UN number       UNNo(DOT)       : UN1016         14.2. UN proper shipping name       : Carbon monoxide, compressed         Dord Proger Shipping Name       : 2.3 - Poison usg as 49 CFR 173.115         Classes       : 2.3 - Class 2.3 - Disonous us y inhibition (see 171.8 of this subchapter) in Hazard Zone D (see provisions (49 CFR 172.102)       : 4 - This material is poisonus by inhibition (see 171.8 of this subchapter) in Hazard Zone D (see provisions (49 CFR 173.x00)       : 302         DOT Prockaging Non Bulk (49 CFR 173.x00)       : 302         DOT Packaging Exo	CARBON MONOXIDE (13C, 99%) (<5% 180) (1641-69-6)								
CARBON MONOXIDE (130, 99%) (c5% 180) (1641-69-6)         Bioaccumulative potential       Not available.         22.4       Mobility in soil         CARBON MONOXIDE (130, 99%) (c5% 180) (1641-69-6)       Ecology - soil         Not available.       Not available.         22.5       Results of PBT and vFVB assessment       Not available.         SECTION 125 Disposal considerations       Int available.         23.1       Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1       UN number         UN-No, (DOT)       : UN1016         14.2       UN proper shipping name         DOT Paper Shipping Name       : Carbon monoxide, compressed         Dapatment of Transportation (DOT)       : 2.3 - Class 2.3 - Poisonous gas 49 GFR 173.115         Classe       : 2.3 - Poison gas         2.1 - Filematerial is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see provisions (49 GFR 172.axx)         DOT Packaging Exceptions (49 GFR 173.axx)       : 302         DOT Packaging Exceptions (49 GFR 173.axx)       : 302         DOT Packaging Exceptions (49 GFR 173.axx)	Persistence and degradability	Not available.							
Bioaccumulative potential       Not available.         12.4.       Mobility in soil         CARBON MONXIDE (13C, 99%) (-5% 180) (1641-89-6)         Ecology - soil       Not available.         12.5.       Results of PBT and VPM assessment         No additional information available       Intravailable.         12.6.       Other adverse effects         Cher adverse effects       : Not available.         SECTION 13: Disposal considerations         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal. State, and Local environmental control regulations.         SECTION 14: Transport information       In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1       UN honer         UN-No.(DOT)       : UN1016         14.2       UN proper shipping name         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Poison gas         2.1 - Flarmable gas       : 2.1 - Flarmable gas         UDT Special Provisions (49 CFR 172.02)       : 4 - The material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(d) of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       : 302         DOT Packaging Non Buk (49 CFR 173.xxx)       : 302	12.3. Bioaccumulative potential								
12.4.       Mobility in soil         CARRON MONOXIDE [130, 99%] (c5% 180) (1641-89-6) Ecology - soil       Not available.         12.5.       Results of PBT and vPvB assessment No additional information available       No additional information available         12.6.       Other adverse effects       Other adverse effects       Other adverse effects         12.6.       Other adverse effects       Other adverse effects       Other adverse effects         13.1.       Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       In acordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1.       UN number       UN1016         14.2.       UN proper shipping name       E Carbon monoxide, compressed         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT)       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Ision gas         2.1 - Fiammable gas       : 1.1 Fiammable gas         DOT Special Provisions (49 CFR 172.102)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(j) of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       : 302         DOT Packaging Bix (49 CFR 173.xxxx)       : 302	CARBON MONOXIDE (13C, 99%) (<5% 180)	(1641-69-6)							
CARBON MONOXIDE (13C, 99%) (45%, 180) (1641-69-6)         Ecclopy - soil       Not available.         12.5. Results of PBT and vPvB assessment       No. available.         12.6. Other adverse effects       : Not available.         SECTION 13: Disposal considerations       : Not available.         SECTION 13: Disposal considerations       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         Section 17: 10; Othy proper shipping name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Poison gas 2.1 - Flammable gas         Li - This material is pois	Bioaccumulative potential	Not available.							
CARBON MONOXIDE (13C, 99%) (45%, 180) (1641-69-6)         Ecclopy - soil       Not available.         12.5. Results of PBT and vPvB assessment       No. available.         12.6. Other adverse effects       : Not available.         SECTION 13: Disposal considerations       : Not available.         SECTION 13: Disposal considerations       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         Section 17: 10; Othy proper shipping name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Poison gas 2.1 - Flammable gas         Li - This material is pois	12.4. Mobility in soil								
Ecology - soil       Not available.         12.5.       Results of PBT and vPVB assessment         No additional information available         12.6.       Other adverse effects         Cher adverse effects       : Not available.         SECTION 13: Disposal considerations         13.1.       Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport Information       In accordance with ADR / RID / ADNR / IMDG / IATA         14.1.       UN number         UN-No. (DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping Name       : Carbon monxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Poison gas         2.1 - Flammable gas       : 2.3 - Poison gas         2.1 - Flammable gas       : 2.3 - Poison gas         2.1 - Flammable gas       : 2.3 - Doison gas         2.1 - Flammable gas       : 2.3 - Doison gas         2.1 - Flammable gas       : 2.3 - Doison gas         2.1 - Flammable gas       : 2.3 - Doison gas         2.1 - Flammable gas       : 2.3 - Doison gas         DOT Packaging Exceptions (49 CFR 172.x02)       : None		(1641-69-6)							
2.5.       Results of PBT and vPvB assessment         No additional information available         2.6.       Other adverse effects         2.6.       Other adverse effects         2.7.       Other adverse effects         3.1.       Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       In accordance with ADR / RD / ADNR / IMDG / ICAO / IATA         14.1.       UM number         UN-No.(DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poison gas         2.1 - Flammable gas       : 2.1 - Flammable gas         UDT Special Provisions (49 CFR 172.102)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter). and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Non Buk (49 CFR 173.xxx)       : No         14.3.       Additional information         Chroni endormation       : No supplementary information available.      <									
No additional information available         12.6       Other adverse effects         SECTION 13: Disposal considerations         13.1       Waske treatment methods         Regional legislation (waste)       : Waske materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information									
12.6. Other adverse effects       : Not available.         SECTION 13: Disposal considerations         13.1. Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       Inaccordance with ADR / IMDG / ICAO / IATA         14.1. UN number       UN Not (DOT)         1007 Projer Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         2.1 - Flammable gas       : 2.1 - Flammable gas         DOT Special Provisions (49 CFR 172.102)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 171.16(a) of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       : 302         DOT Packaging Non Bulk (49 CFR 173.xxx)       : 302         DOT Packaging Bulk (49 CFR 173.xxx)       : 314.315         Marine pollutant       : No         14.3. Additional information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       : 2 - Gases         Hazard (defind Information       : No Supplementa		int							
Other adverse effects       : Not available.         SECTION 13: Disposal considerations         13.1.       Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information       In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1.       UN number         UN-No.(DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.1 - Flammable gas         July Cordination (ADCT)       : 4. This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.8 nd full of this subchapter) in Hazard Zone D (see 173.8 nd full of this subchapter).         DOT Special Provisions (49 CFR 172.102)       : 4. This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.8 nd full of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       : 302         DOT Packaging Buk (49 CFR 173.xxx)       : 302         DOT Packaging Buk (49 CFR 173.xxx)       : 314.315         Marine pollutant       : No         14.3.       Additional Information <td></td> <td></td>									
SECTION 13: Disposal considerations         13.1       Waste treatment methods         Regional legislation (waste)       :       Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information         In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1       UN number         UN-No.(DOT)       :       UN1016         14.2       UN proper shipping name       :       Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       :       2.3 - Olass 2.3 - Poisonous gas 49 CFR 173.115         Classes       :       :       2.3 - Poison gas         2.1 - Flammable gas       :       :       :         Volt Special Provisions (49 CFR 172.102)       :       4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       :       :         DOT Packaging Non Buk (49 CFR 173.xxx)       :       :       None         DOT Packaging Buk (49 CFR 173.xxx)       :       :       None         DOT Packaging Buk (49 CFR 173.xxx)       :       :       None         DOT Packaging Buk (49 CFR 173.xxx)       :       :       : <td></td> <td></td>									
13.1. Waste treatment methods         Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information         In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1. UN number         UN-No.(DOT)       : UN1016         14.2. UN proper shipping name       : Carbon monoxide, compressed         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         2.1 - Flammable gas       : 2.1 - Flammable gas         Vortice       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 177.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions (49 CFR 172.102)         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Bulk (49 CFR 173.xxx)       : 302         DOT Packaging Bulk (49 CFR 173.xxx)       : 302         DOT Packaging Bulk (49 CFR 173.xxx)       : No         14.3. Additional information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       : Caseses     <	Other adverse effects	. NOLAVAIIADIE.							
Regional legislation (waste)       : Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.         SECTION 14: Transport information         In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1       UN number         UN-No.(DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         Alar and labels (DOT)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 177.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter).         DOT Special Provisions (49 CFR 172.102)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 177.115(a) of this subchapter).         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Buk (49 CFR 173.xxx)       : None         DOT Packaging Buk (49 CFR 173.xxx)       : No         14.3       Additional information         Cher information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland tran	<b>SECTION 13: Disposal consideration</b>	IS							
environmental control regulations.  SECTION 14: Transport information In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA 14.1 UN number UN-No.(DOT) : UN1016  14.2 UN proper shipping name DOT Proper Shipping Name : Carbon monoxide, compressed Department of Transportation (DOT) Hazard : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115 Classes Hazard labels (DOT) : 2.3 - Poison gas 2.1 - Flammable gas DOT Special Provisions (49 CFR 172.102) : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter. DOT Packaging Exceptions (49 CFR 173.xxx) : None DOT Packaging Bulk (49 CFR 173.xxx) : 302 DOT Packaging Bulk (49 CFR 173.xxx) : 314:315 Marine pollutant : No  14.3. Additional information Other information : No supplementary information available. Special transport precautions : IATA/DOT: Not permitted on passenger aircraft. Overland transport Class (ADR) : 2 - Gases Hazard identification number (Kemler No.) : 263	13.1. Waste treatment methods								
SECTION 14: Transport Information         In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA         14.1       UN number         UN-No.(DOT)       : UN1016         14.2.       UN proper shipping name         DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.1 - Flammable gas         Hazard labels (DOT)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 171.8 of this subchapter) in Hazard Zone D (see 171.8 of this subchapter) in Hazard Zone D (see 171 Reading Exceptions (49 CFR 173.xxx))         DOT Special Provisions (49 CFR 173.xxx)       : None         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Buk (49 CFR 173.xxx)       : 302         DOT Packaging point information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       : Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263	Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and Local							
In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA          14.1       UN number         UN-No.(DOT)       :         Classes       :         Hazard is poisonous gas 49 CFR 173.115         Classes       :         Porvisions (49 CFR 172.102)       :         UN-Packaging Exceptions (49 CFR 173.xxx)       :         OT Packaging Non Bulk (49 CFR 173.xxx)       :         OT Packaging Bulk (49 CFR 173.xxx)       :         No       : <td></td> <td>environmental control regulations.</td>		environmental control regulations.							
In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA          14.1       UN number         UN-No.(DOT)       :         Classes       :         Hazard is poisonous gas 49 CFR 173.115         Classes       :         Porvisions (49 CFR 172.102)       :         UN-Packaging Exceptions (49 CFR 173.xxx)       :         OT Packaging Non Bulk (49 CFR 173.xxx)       :         OT Packaging Bulk (49 CFR 173.xxx)       :         No       : <td>SECTION 14: Transport information</td> <td></td>	SECTION 14: Transport information								
14.1. UN number         UN-No.(DOT)       : UN1016         14.2. UN proper shipping name       : Carbon monoxide, compressed         DoT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         Hazard labels (DOT)       :: 2.3 - Poison gas         2.1 - Flammable gas       :: 2.3 - Poison ous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Special Provisions (49 CFR 172.102)       :: 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :: 302         DOT Packaging Bulk (49 CFR 173.xxx)       :: 302         DOT Packaging Bulk (49 CFR 173.xxx)       :: 314;315         Marine pollutant       :: No         14.3. Additional information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       : 2- Gases         Hazard identification number (Kemler No.)       : 263	•	CAO / ΙΑΤΑ							
UN-No.(DOT)       : UN1016 <b>14.2.</b> UN proper shipping name       : Carbon monoxide, compressed         DoT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         Hazard labels (DOT)       :: 2.3 - Poison gas         2.1 - Flammable gas       :: 2.3 - Poison us gas         DOT Special Provisions (49 CFR 172.102)       :: 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Buk (49 CFR 173.xxx)       : 302         DOT Packaging Buk (49 CFR 173.xxx)       : 314;315         Marine pollutant       : No <b>14.3.</b> Additional information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft. <b>Overland transport</b> : Casaes         Hazard identification number (Kemler No.)       : 263									
14.2. UN proper shipping name       : Carbon monoxide, compressed         DoT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Poison gas         Hazard labels (DOT)       : 2.3 - Poison gas         2.1 - Flammable gas		: UN1016							
DOT Proper Shipping Name       : Carbon monoxide, compressed         Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Hazard labels (DOT)       : 2.3 - Poison gas         2.1 - Flammable gas									
Department of Transportation (DOT) Hazard       : 2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115         Classes       : 2.3 - Doison gas         Hazard labels (DOT)       : 2.3 - Doison gas         2.1 - Flammable gas       : 1.7 Flammable gas         DOT Special Provisions (49 CFR 172.102)       : 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       : None         DOT Packaging Non Bulk (49 CFR 173.xxx)       : 302         DOT Packaging Bulk (49 CFR 173.xxx)       : 302         DOT Packaging Bulk (49 CFR 173.xxx)       : None <b>14.3.</b> Additional information       : No supplementary information available.         Special transport precautions       : No supplementary information available.         Special transport precautions       : 2 - Gases         Hazard identification number (Kemler No.)       : 2 63									
Classes       1 </td <td></td> <td></td>									
2.1 - Flammable gas         Visition         DOT Special Provisions (49 CFR 172.102)         :       4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :       None         DOT Packaging Bulk (49 CFR 173.xxx)       :       302         DOT Packaging Bulk (49 CFR 173.xxx)       :       314;315         Marine pollutant       :       No <b>14.3.</b> Additional information       :       No         Other information       :       No supplementary information available.         Special transport precautions       :       IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :       2 - Gases         Hazard identification number (Kemler No.)       :       263		2.3 - Class 2.3 - Poisonous gas 49 CFR 173.115							
2.1 - Flammable gas         Visition         DOT Special Provisions (49 CFR 172.102)         :       4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :       None         DOT Packaging Bulk (49 CFR 173.xxx)       :       302         DOT Packaging Bulk (49 CFR 173.xxx)       :       314;315         Marine pollutant       :       No <b>14.3.</b> Additional information       :       No         Other information       :       No supplementary information available.         Special transport precautions       :       IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :       2 - Gases         Hazard identification number (Kemler No.)       :       263	Hazard labels (DOT)	: 2.3 - Poison gas							
173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :         None       302         DOT Packaging Bulk (49 CFR 173.xxx)       :         314;315       314;315         Marine pollutant       :         No         14.3. Additional information         Other information       :         Special transport precautions       :         IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :         Class (ADR)       :         Hazard identification number (Kemler No.)       :         263		2.1 - Flammable gas							
173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :         None       302         DOT Packaging Bulk (49 CFR 173.xxx)       :         314;315       314;315         Marine pollutant       :         No         14.3. Additional information         Other information       :         Special transport precautions       :         IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :         Class (ADR)       :         Hazard identification number (Kemler No.)       :         263									
173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :         None       302         DOT Packaging Bulk (49 CFR 173.xxx)       :         314;315       314;315         Marine pollutant       :         No         14.3. Additional information         Other information       :         Special transport precautions       :         IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :         Class (ADR)       :         Hazard identification number (Kemler No.)       :         263									
173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :         None       302         DOT Packaging Bulk (49 CFR 173.xxx)       :         314;315       314;315         Marine pollutant       :         No         14.3. Additional information         Other information       :         Special transport precautions       :         IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :         Class (ADR)       :         Hazard identification number (Kemler No.)       :         263									
173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.         DOT Packaging Exceptions (49 CFR 173.xxx)       :         None       302         DOT Packaging Bulk (49 CFR 173.xxx)       :         314;315       314;315         Marine pollutant       :         No         14.3. Additional information         Other information       :         Special transport precautions       :         IATA/DOT: Not permitted on passenger aircraft.         Overland transport       :         Class (ADR)       :         Hazard identification number (Kemler No.)       :         263									
provisions of this subchapter.DOT Packaging Exceptions (49 CFR 173.xxx): NoneDOT Packaging Non Bulk (49 CFR 173.xxx): 302DOT Packaging Bulk (49 CFR 173.xxx): 314;315Marine pollutant: No14.3. Additional informationCother information: No supplementary information available.Special transport precautions: IATA/DOT: Not permitted on passenger aircraft.Overland transportClass (ADR): 2 - GasesHazard identification number (Kemler No.): 263	DOT Special Provisions (49 CFR 172.102)	: 4 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone D (see							
DOT Packaging Exceptions (49 CFR 173.xxx):NoneDOT Packaging Non Bulk (49 CFR 173.xxx)::OT Packaging Bulk (49 CFR 173.xxx)::Marine pollutant::14.3. Additional information:Other information:No supplementary information available.Special transport precautions:IATA/DOT: Not permitted on passenger aircraft.Overland transport:Class (ADR):2 - GasesHazard identification number (Kemler No.):263									
DOT Packaging Non Bulk (49 CFR 173.xxx): 302DOT Packaging Bulk (49 CFR 173.xxx): 314;315Marine pollutant: No14.3. Additional informationOther information: No supplementary information available.Special transport precautions: IATA/DOT: Not permitted on passenger aircraft.Overland transportClass (ADR): 2 - GasesHazard identification number (Kemler No.): 263	DOT Packaging Exceptions (49 CER 173 vvv)								
DOT Packaging Bulk (49 CFR 173.xxx): 314;315Marine pollutant: No14.3. Additional informationI Additional informationI No supplementary information available.Other information: No supplementary information available.Special transport precautions: IATA/DOT: Not permitted on passenger aircraft.Overland transport: 2 - GasesHazard identification number (Kemler No.): 263									
Marine pollutant       : No         14.3. Additional information									
14.3. Additional information         Other information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       .         Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263									
Other information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       .         Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263	1								
Other information       : No supplementary information available.         Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport       .         Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263	14.3. Additional information								
Special transport precautions       : IATA/DOT: Not permitted on passenger aircraft.         Overland transport		: No supplementary information available.							
Overland transport         Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263									
Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263	Special transport precautions								
Class (ADR)       : 2 - Gases         Hazard identification number (Kemler No.)       : 263	Overland transport								
Hazard identification number (Kemler No.) : 263	-								

Safety Data Sheet according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5 5 ( )	
Danger labels (ADR)	: 2.3 - Toxic gases 2.1 - Flammable gases
Orange plates	263 1016
Tunnel restriction code	: B/D
Limited quantities (ADR)	0
EAC	: 2SE
Excepted quantities (ADR)	: E0
Transport by sea	
DOT Vessel Stowage Location	: D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
MFAG-No	: 119
Air transport	
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: Forbidden
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 25 kg
Civil Aeronautics Law	: Gases under pressure/Gases toxic under pressure
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: IATA/DOT: Not permitted on passenger aircraft.
14.6. Transport in bulk according to Anne	ex II of MARPOL 73/78 and the IBC Code
Tanaport in burk according to Anne	

Not applicable

SECTION 15: Regulatory information				
15.1. US Federal regulations				
CARBON MONOXIDE (13C, 99%) (<5% 18O) (1641-69-6)				
SARA Section 311/312 Hazard Classes	Fire hazard Sudden release of pressure hazard Immediate (acute) health hazard Delayed (chronic) health hazard			

15.2. International regulations		
CANADA		
CARBON MONOXIDE (13C, 99%) (<5% 18O) (1641-69-6)		
Listed on the Canadian DSL (Domestic Substances List) inventory.		

#### 15.2.1. National regulations

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.3. US State regulations				
CARBON MONOXIDE (13C, 99%) (<5% 18O)(1641-69-6)				
U.S California - Proposition 65 - Carcinogens List	Yes			
U.S California - Proposition 65 - Reproductive Toxicity - Female	Yes			
U.S California - Proposition 65 - Reproductive Toxicity - Male	Yes			
State or local regulations	U.S Massachusetts - Right To Know List U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List WARNING! This product contains a chemical known by the state of California to cause birth defects or other reproductive harm.			

#### **SECTION 16: Other information**

Other information

: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

#### Full text of R-, H- and EUH-phrases::

, , , , , , , , , , , , , , , , , , , ,	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Compressed gas	Gases under pressure Compressed gas
Flam. Gas 1	Flammable gases Category 1
Repr. 1A	Reproductive toxicity Category 1A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
H331	Toxic if inhaled
H360FD	May damage fertility. May damage the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
R12	Extremely flammable
R48/23	Toxic: danger of serious damage to health by prolonged exposure through inhalation
R5	Heating may cause an explosion
R60	May impair fertility
R61	May cause harm to the unborn child
F+	Extremely flammable
Т	Toxic

NFPA health hazard	<ul> <li>2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.</li> </ul>	4
NFPA fire hazard	<ul> <li>4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.</li> </ul>	
NFPA reactivity	<ul> <li>0 - Normally stable, even under fire exposure conditions, and are not reactive with water.</li> </ul>	$\searrow$
HMIS III Rating		
Health	: 2 Moderate Hazard - Temporary or minor injury may occur	
Flammability	: 4 Severe Hazard	
Physical	: 0 Minimal Hazard	

CIL Multi-Solvent Mixture SDS

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