Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name • **Gun Scrubber Synthetic Safe Firearm Cleaner**

Synonyms • Gun Scrubber(R) Synthetic Safe Cleaner; Gun Scrubber(R) Synthetic Safe Cleaner - Aerosol

Product Code • 33340; 33344; 33348

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

Relevant identified use(s) • For the cleaning of firearm metal parts

1.3 Details of the supplier of the safety data sheet

Manufacturer • Birchwood Casey, LLC

7887 Fuller Road, Suite 100
Eden Prairie, MN 55344
United States
www.birchwoodcasey.com

Telephone (General) • 952-388-6717

1.4 Emergency telephone number

Manufacturer • 1-800-424-9300

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP • Flammable Aerosols 1 - H222
Skin Irritation 2 - H315
Eye Irritation 2 - H319
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation - H335
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
Reproductive Toxicity 2 - H361f
Specific Target Organ Toxicity Repeated Exposure 2 - H373
Hazardous to the aquatic environment Chronic 2 - H411

DSD/DPD • Extremely Flammable (F+)
Harmful (Xn)
Irritant (Xi)
Substances Toxic To Reproduction - Category 3
Dangerous to the Environment (N)
R12, R36/38, R48/20, R51, R53, R62, R67

2.2 Label Elements

CLP

DANGER

Hazard statements

- H222 - Extremely flammable aerosol
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H336 - May cause drowsiness or dizziness
- H361f - Suspected of damaging fertility.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention

- P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
- P211 - Do not spray on an open flame or other ignition source.
- P251 - Pressurized container: Do not pierce or burn, even after use.
- P260 - Do not breathe mists, vapours, and/or spray.
- P264 - Wash thoroughly after handling.
- P271 - Use only outdoors or in a well-ventilated area.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves and eye/face protection , .

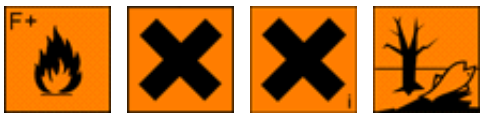
Response

- P391 - Collect spillage.
- P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
- P321 - Specific treatment, see supplemental first aid information.
- P362 - Take off contaminated clothing and wash before reuse.
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage/Disposal

- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up.
- P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF.
- P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD



Risk phrases

- R12 - Extremely flammable.
- R36/38 - Irritating to eyes and skin.
- R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R51 - Toxic to aquatic organisms.
- R53 - May cause long-term adverse effects in the aquatic environment.
- R62 - Possible risk of impaired fertility.
- R67 - Vapours may cause drowsiness and dizziness.

Safety phrases

- S9 - Keep container in a well ventilated place
- S16 - Keep away from sources of ignition - No Smoking.
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 - Wear suitable gloves.
- S57 - Use appropriate containment to avoid environmental contamination.

2.3 Other Hazards

CLP
- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD
- According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012
- Flammable Aerosols 1
  Skin Irritation 2
  Eye Irritation 2A
  Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
  Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
  Reproductive Toxicity 2
  Specific Target Organ Toxicity Repeated Exposure 2

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements
- Extremely flammable aerosol
  Causes skin irritation
  Causes serious eye irritation
  May cause respiratory irritation
  May cause drowsiness or dizziness
  Suspected of damaging fertility or the unborn child.
  May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention
- Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
  Do not spray on an open flame or other ignition source.
  Pressurized container: Do not pierce or burn, even after use.
  Do not breathe mists, vapours, and/or spray.
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves, clothing , and eye/face protection , .

Response
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
  Call a POISON CENTER or doctor/physician if you feel unwell.
  If on skin: Wash with plenty of water .
  Specific treatment, see supplemental first aid information.
  Take off contaminated clothing and wash before reuse.
  If skin irritation occurs: Get medical advice/attention.
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  If eye irritation persists: Get medical advice/attention.
  IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Storage/Disposal
- Store in a well-ventilated place. Keep container tightly closed.
  Store locked up.
  Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF.
  Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Flammable Aerosols - B5
  Other Toxic Effects - D2A
  Other Toxic Effects - D2B

2.2 Label elements

WHMIS

- Flammable Aerosols - B5
  Other Toxic Effects - D2A
  Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition					
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
Methylpentanes	NDA	> 9%	NDA	**EU DSD/DPD:** Not Classified **EU CLP:** Not Classified **OSHA HCS 2012:** Not Classified	NDA
Methylcyclopentane	**CAS:**96-37-7 **EC Number:**202-503-2	> 9%	NDA	**EU DSD/DPD:** Annex VI, Table 3.2: F; R11; Xn; R48/20; R67 **EU CLP:** Annex VI, Table 3.1: Flam. Liq. 2, H225; STOT RE 2 (PNS), H373; STOT SE 3: Narc., H336 **OSHA HCS 2012:** Flam. Liq. 2, STOT RE 2 (PNS); STOT SE 3, Narc.	NDA
Isopropyl alcohol	**CAS:**67-63-0 **EC Number:**200-661-7 **EU Index:**603-117-00-0	> 9%	Inhalation-Rat LC50 • 16000 ppm 8 Hour (s) Skin-Rabbit LD50 • 12800 mg/kg Ingestion/Oral-Rat LD50 • 5000 mg/kg	**EU DSD/DPD:** Annex VI, Table 3.2: F; R11; Xi; R36; R67 **EU CLP:** Annex VI, Table 3.1: Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3: Narc., H336 **OSHA HCS 2012:** Flam. Liq. 2; Eye Irrit. 2A;	NDA
				EU DSD/DPD: Annex VI, Table 3.2: F; R11; Repr. 3;	

Hexane	**CAS:**110-54-3 **EC Number:**203-777-6 **EU Index:**601-037-00-0	> 9%	Ingestion/Oral-Rat LD50 • 25 g/kg Inhalation-Rat LC50 • 48000 ppm 4 Hour(s)	R62; Xn; R65-48/20; Xi; R38; R67; N; R51-53 **EU CLP:** Annex VI, Table 3.1: Flam. Liq. 2, H225; Repr. 2, H361f; Asp. Tox. 1, H304; STOT RE 2*, H373; Skin Irrit. 2, H315; STOT SE 3: Narc., H336; Aquatic Chronic 2, H411 **OSHA HCS 2012:** Flam. Liq. 2; Repr. 2; STOT RE 2 (CNS & Nervous System); Skin Irrit. 2; Eye Irrit. 2B; STOT SE 3: Narc. & Resp. Irrit.; Asp. Tox. 1	NDA
Carbon dioxide	**CAS:**124-38-9 **EC Number:**204-696-9	1% TO 5%	Inhalation-Rat LC50 • 470000 ppm 30 Minute(s)	**EU DSD/DPD:** Not Classified **EU CLP:** Self Classified: Press. Gas - Comp., H280 **OSHA HCS 2012:** Press. Gas - Comp.; Simp. Asphyx.	NDA

See Section 11 for Toxicological Information. See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin
- In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Take off contaminated clothing. If irritation develops and persists, get medical attention.

Eye
- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion
- If victim is conscious, give 1 – 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Water spray, carbon dioxide, dry chemical.

Unsuitable Extinguishing Media
- No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Containers may explode when heated.
  Vapor explosion hazard indoors, outdoors or in sewers.
  HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.
  Many liquids are lighter than water.
  Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
  Runoff to sewer may create fire or explosion hazard.
  Vapors may form explosive mixtures with air.
  Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products
- No data available

5.3 Advice for firefighters

- Structural firefighters' protective clothing will only provide limited protection.
  Wear positive pressure self-contained breathing apparatus (SCBA).
  Move containers from fire area if you can do it without risk.
  LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Avoid contact with skin, eyes or clothing. Do not breathe fume, mist, vapours and/or spray.

Emergency Procedures

- As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Stop leak if you can do it without risk.
  Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
  Use clean non-sparking tools to collect absorbed material.
  A vapor suppressing foam may be used to reduce vapors.
  All equipment used when handling the product must be grounded.
  LARGE SPILLS: Dike far ahead of liquid spill for later disposal.
  LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe fume, mist, vapours and/or spray. Avoid contact with skin, eyes, and clothing. Avoid contact with heat and ignition sources. Take precautionary measures against static charges. Do not puncture or incinerate container. Empty containers may still have product residue and flammable vapors. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Do not store where temperature may exceed 120ºF.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Canada Ontario**	**Canada Quebec**	**Europe**	**Germany DFG**
Carbon dioxide (124-38-9)	TWAs	5000 ppm TWA	5000 ppm TWA	5000 ppm TWAEV; 9000 mg/m3 TWAEV	5000 ppm TWA; 9000 mg/m3 TWA	Not established
	STELs	30000 ppm STEL	30000 ppm STEL	30000 ppm STEV; 54000 mg/m3 STEV	Not established	Not established
	Ceilings	Not established	Not established	Not established	Not established	10000 ppm Peak; 18200 mg/m3 Peak
	MAKs	Not established	Not established	Not established	Not established	5000 ppm TWA MAK; 9100 mg/m3 TWA MAK
Methylcyclopentane (96-37-7)	Ceilings	Not established	Not established	Not established	Not established	1000 ppm Peak (except n-Hexane, listed under Hexane); 3600 mg/m3 Peak (except n-Hexane, listed under Hexane)
	MAKs	Not established	Not established	Not established	Not established	500 ppm TWA MAK; 1800 mg/m3 TWA MAK

Exposure Limits/Guidelines (Con't.)				
	Result	**Germany TRGS**	**NIOSH**	**OSHA**
Carbon dioxide (124-38-9)	TWAs	5000 ppm TWA AGW (exposure factor 2); 9100 mg/m3 TWA AGW (exposure factor 2)	5000 ppm TWA; 9000 mg/m3 TWA	5000 ppm TWA; 9000 mg/m3 TWA
	STELs	Not established	30000 ppm STEL; 54000 mg/m3 STEL	Not established
Methylcyclopentane (96-37-7)	TWAs	500 ppm TWA AGW (exposure factor 2); 1800 mg/m3 TWA AGW (exposure factor 2)	Not established	Not established

Exposure Control Notations

Germany DFG

- Methylcyclopentane (96-37-7): **Pregnancy:** (classification not yet possible)
- Hexane (110-54-3): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)
- Isopropyl alcohol (67-63-0): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear safety goggles.

Skin/Body	• Wear appropriate gloves.
Environmental Exposure Controls	• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene
MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration
NIOSH = National Institute of Occupational Safety and Health
STEV = Short Term Exposure Value
OSHA = Occupational Safety and Health Administration
STEL = Short Term Exposure Limits are based on 15-minute exposures
TWAEV = Time-Weighted Average Exposure Value
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Aerosol	Appearance/Description	Aerosol
Color	Data lacking	Odor	Data lacking
Odor Threshold	Data lacking		
General Properties			
Boiling Point	151 to 180 F(66.1111 to 82.2222 C)	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking
Viscosity	Data lacking	Explosive Properties	Not Explosive.
Oxidizing Properties:	Not an oxidizer.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Heavier than air
Evaporation Rate	Slower than ether	Volatiles (Wt.)	5.9 lbs/gal
Volatiles (Vol.)	100 %		
Flammability			
Flash Point	-15 F(-26.1111 C) TCC (Tagliabue Closed Cup)	UEL	Data lacking
LEL	>1.2%	Autoignition	Data lacking
Flammability (solid, gas)	Flammable aerosol.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Avoid high temperatures (>120ºF) and ignition sources.

10.5 Incompatible materials

- Strong oxidizers.

10.6 Hazardous decomposition products

- Thermal decomposition may produce carbon monoxide, carbon dioxide, sulfur oxides, aldehydes.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Carbon dioxide (1% TO 5%)	124-38-9	**Acute Toxicity:** Inhalation-Rat LC50 • 470000 ppm 30 Minute(s); **Reproductive:** Inhalation-Rat TCLo • 6 pph 24 Hour(s)(10D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**; *Reproductive Effects:Specific Developmental Abnormalities*:**Cardiovascular (circulatory) system**; *Reproductive Effects:Specific Developmental Abnormalities*:**Respiratory system**
Methylcyclopentane (> 9%)	96-37-7	**Multi-dose Toxicity:** Ingestion/Oral-Rat TDLo • 10 g/kg 4 Week(s)-Intermittent; *Nutritional and Gross Metabolic:Gross Metabolite Changes*:**Weight loss or decreased weight gain**; *Related to Chronic Data*:**Death in the Other Multiple Dose data type field**

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Aspiration Hazard	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Carcinogenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Germ Cell Mutagenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin corrosion/Irritation	**EU/CLP** • Skin Irritation 2 **OSHA HCS 2012** • Skin Irritation 2
Skin sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-RE	**EU/CLP** • Specific Target Organ Toxicity Repeated Exposure 2 **OSHA HCS 2012** • Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	**EU/CLP** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation **OSHA HCS 2012** • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	**EU/CLP** • Toxic to Reproduction 2 **OSHA HCS 2012** • Toxic to Reproduction 2

Respiratory sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Serious eye damage/Irritation	**EU/CLP** • Eye Irritation 2 **OSHA HCS 2012** • Eye Irritation 2A

Target Organs
- Nervous System, Central Nervous System (CNS)

Route(s) of entry/exposure
- Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)
- May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death. Extremely high vapor concentrations may lead to asphyxiation.

Chronic (Delayed)
- No data available.

Skin

Acute (Immediate)
- Causes skin irritation.

Chronic (Delayed)
- No data available.

Eye

Acute (Immediate)
- Causes serious eye irritation.

Chronic (Delayed)
- No data available.

Ingestion

Acute (Immediate)
- May cause irritation to the gastrointestinal tract.

Chronic (Delayed)
- No data available.

Other

Chronic (Delayed)
- Chronic exposure to Hexane, a component of this material, may produce important peripheral neuropathy (motor sensory) and CNS abnormalities.

Reproductive Effects
- Repeated and prolonged exposure may affect the reproductive system.

Key to abbreviations

LC = Lethal Concentration
LD = Lethal Dose
MLD = Mild
SEV = Severe
TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

Gun Scrubber Synthetic Safe Firearm Cleaner					
Dosage	**Species**	**Duration**	**Results**	**Exposure Conditions**	**Comments**
0.00025 mg/L	**Fish:** Fathead minnow	96 Hour(s)	LC50	NDA	Data for Hexane

- Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

- Material data lacking.

12.3 Bioaccumulative potential

- Material data lacking.

12.4 Mobility in Soil

- Material data lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1950	Aerosols	2.1	NDA	NDA
TDG	UN1950	AEROSOLS	2.1	NDA	NDA
IMO/IMDG	UN1950	AEROSOLS	2.1	NDA	NDA
IATA/ICAO	UN1950	Aerosols, flammable	2.1	NDA	NDA

14.6 Special precautions for user
- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications
- Acute, Chronic, Fire, Pressure(Sudden Release of)

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Carbon dioxide	124-38-9	Yes	Yes	Yes

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**EU EINECS**	**EU ELNICS**	**TSCA**
Carbon dioxide	124-38-9	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Carbon dioxide	124-38-9	A; Uncontrolled product according to WHMIS

		classification criteria (solid)

Canada - WHMIS - Ingredient Disclosure List

• Carbon dioxide	124-38-9	1 %

Environment

Canada - 2004 NPRI (National Pollutant Release Inventory)

• Carbon dioxide	124-38-9	Not Listed

Canada - 2005 NPRI (National Pollutant Release Inventory)

• Carbon dioxide	124-38-9	Not Listed

Canada - CEPA - Greenhouse Gases Subject to Mandatory Reporting

• Carbon dioxide	124-38-9	1 GWP

Canada - CEPA - Priority Substances List

• Carbon dioxide	124-38-9	Not Listed

Canada - DWQ (Drinking Water Quality) - IMACs

• Carbon dioxide	124-38-9	Not Listed

Other

Canada - Accelerated Reduction/Elimination of Toxics (ARET)

• Carbon dioxide	124-38-9	Not Listed

Canada New Brunswick

Environment

Canada - New Brunswick - Ozone Depleting Substances - Schedule A

• Carbon dioxide	124-38-9	Not Listed

Canada - New Brunswick - Ozone Depleting Substances - Schedule B

• Carbon dioxide	124-38-9	Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

• Carbon dioxide	124-38-9	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

• Carbon dioxide	124-38-9	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

• Carbon dioxide	124-38-9	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

• Carbon dioxide	124-38-9	Not Listed

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

• Carbon dioxide	124-38-9	Not Listed

Mexico

Other

Mexico - Hazard Classifications

• Carbon dioxide	124-38-9	Hazard Class = 2.2 UN1013; Hazard Class = 9 PG = III UN1845; Hazard Class = 2.3 UN2187

Mexico - Regulated Substances

• Carbon dioxide	124-38-9	UN1013; UN1845; UN2187

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Carbon dioxide	124-38-9	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Carbon dioxide	124-38-9	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Carbon dioxide	124-38-9	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Carbon dioxide	124-38-9	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Carbon dioxide	124-38-9	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Carbon dioxide	124-38-9	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Carbon dioxide	124-38-9	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Carbon dioxide	124-38-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Carbon dioxide	124-38-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Carbon dioxide	124-38-9	Not Listed

United States - Pennsylvania

Labor

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

• Carbon dioxide	124-38-9	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Carbon dioxide	124-38-9	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H225 - Highly flammable liquid and vapour
  H280 - Contains gas under pressure; may explode if heated
  H304 - May be fatal if swallowed and enters airways

  R11 - Highly flammable.
  R36 - Irritating to eyes.
  R38 - Irritating to skin.
  R65 - Harmful: may cause lung damage if swallowed.

Last Revision Date
- 05/March/2015

Preparation Date
- 05/March/2015

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Key to abbreviations

NDA = No data available