

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND MANUFACTURER'S IDENTIFICATION

Product ID: SAM#5117C
Product Name: Dental Handpiece Lubricant (with CO2)
Revision Date: Aug 16, 2017 **Date Printed:** Sep 03, 2019
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Southland Distribution & Sales
Address: 4003 ENTERPRISE COURT AUGUSTA, GA, US, 30907
Emergency Phone: CHEMTREC U.S.:1-800-424-9300 INTERNATIONAL CALLS: 1-703-527-3887
Information Phone Number: 1-800-880-0240
Fax:
Product/Recommended Uses: Lubricant

SECTION 2) HAZARDS IDENTIFICATION

Classification

Aerosols Category 3

Aspiration Hazard - Category 1

Pictograms



Signal Word

Danger

Hazardous Statements - Physical

H229 - Pressurised container: May burst if heated.

Hazardous Statements - Health

H304 - May be fatal if swallowed and enters airways.

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 - Do not pierce or burn, even after use.

Precautionary Statements - Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

Precautionary Statements - Storage

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P405 - Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Acute toxicity of 10.8% of the mixture is unknown

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0008042-47-5	MINERAL OIL, SLAB OIL	61% - 100%
Trade Secret.	Food Grade Synthetic Hydrocarbons of synthetic, biodegradable, non-toxic lubricants	6% - 13%
0000124-38-9	CO2	0.9% - 2%

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/If you feel unwell/If concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

IF exposed or concerned: Get medical advice/attention.

Eye Contact

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Do not direct a solid stream of water or foam into hot, burning pools this may results in frothing and increase fire intensity.

Unsuitable Extinguishing Media

No data available.

Specific Hazards in Case of Fire

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressures. Cool with water.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.

Fire-Fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment

Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning Up

Absorb liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

Store at temperatures below 120°F.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC,

neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
CO2	5000	9000			1			5000
MINERAL OIL, SLAB OIL								

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
CO2	9000	30000	54000		5000		30000	
MINERAL OIL, SLAB OIL					(L)	[(L)]; [5 (I)];		

(L) - Exposure by all routes should be carefully controlled to levels as low as possible

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

VOC Actual(g/l)	0.00000 g/l
Density	7.02074 lb/gal
Density VOC	0.00000 lb/gal
% VOC	0.00000%

Appearance	Viscous liquid
Odor Threshold	N.A.
Odor Description	Mild
pH	N.A.
Flammability	N/A
Water Solubility	N.A.
Flash Point Symbol	N.A.
Flash Point	N.A.
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Freezing Point	N.A.
Melting Point	N.A.
Low Boiling Point	N.A.
High Boiling Point	N.A.
Auto Ignition Temp	N.A.

Evaporation Rate	N.A.
VOC Composite Partial Pressure	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Avoid strong oxidizers, reducers, acids, and alkalis.

Conditions to Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.
Dropping containers may cause bursting.

Hazardous Decomposition Products

No data available.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation

Prolonged or repeated contact with this product may dry and/or defat the skin. This product may be harmful if it is absorbed through the skin.

No data available.

Serious Eye Damage/Irritation

Eye contact may lead to permanent damage if not treated promptly.

Liquid or vapors may irritate the eyes.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Eye contact may lead to permanent damage if not treated promptly.

No data available.

Respiratory/Skin Sensitization

No data available.

Germ Cell Mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure

No data available.

Specific Target Organ Toxicity - Repeated Exposure

Causes damage to organs through prolonged or repeated exposure.

No data available.

Aspiration Hazard

May be fatal if swallowed and enters airways.

0008042-47-5 MINERAL OIL, SLAB OIL

If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis.

Acute Toxicity

If inhaled, may cause dizziness, nausea, upper respiratory irritation, drowsiness, mental depression or narcosis, difficulty in breathing,

irregular heart beats.
0008042-47-5 MINERAL OIL, SLAB OIL
LD50 (Rat, oral): > 5000 mg/kg, Reference: REACH registration Dossier.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No data available.

Persistence and Degradability

0008042-47-5 MINERAL OIL, SLAB OIL

Inherently biodegradable, but not readily biodegradable.

Bio-accumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0008042-47-5 MINERAL OIL, SLAB OIL

This substance is not PBT/vPvB

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

Ground Transportation: (Continental United States, Canada & Mexico): Limited Quantity

IMDG Information

Shipping Name: Aerosols

UN/NA #: 1950

Hazard Class: 2.2

Required Placard: Limited Quantity

Marine Pollutant: No data available

IATA Information

Shipping Name: Aerosols,

UN/NA #: 1950

Hazard Class: 2.2

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0008042-47-5	MINERAL OIL, SLAB OIL	61% - 100%	Canada_NPRI,DSL,SARA312,TSCA
0000124-38-9	CO2	0.9% - 2%	DSL,SARA312,TSCA

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; N.A. - Not Available; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: SOU01009
Product Name: BIO LUBE HANDPIECE CLEANER
Revision Date: Feb 18, 2016 **Date Printed:** Feb 18, 2016
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Southland Distribution & Sales
Address: 4003 ENTERPRISE COURT AUGUSTA, GA, US, 30907
Emergency Phone: CHEMTREC U.S.:1-800-424-9300 INTERNATIONAL CALLS: 1-703-527-3887
Information Phone Number: 1-800-880-0240
Fax:
Product/Recommended Uses: DENTAL HANDPIECE CLEANER

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Skin Irritation - Category 2
Eye Irritation - Category 2A
Acute aquatic toxicity - Category 3
Aerosols Category 3
Chronic aquatic toxicity - Category 3

Pictograms:



Signal Word:

Warning

Hazardous Statements - Physical:

H229 - Pressurised container: May burst if heated

Hazardous Statements - Health:

H315 - Causes skin irritation
H319 - Causes serious eye irritation

Hazardous Statements - Environmental:

H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - General:

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention:

P264 - Wash thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P273 - Avoid release to the environment.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 - Do not pierce or burn, even after use.

Precautionary Statements - Response:

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P321 - For specific treatment see section 4.

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

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.

Precautionary Statements - Storage:

P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Precautionary Statements - Disposal:

P501 - Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Acute toxicity of less than one percent of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0000156-60-5	1,2-DICHLOROETHYLENE	49% - 80%
0163702-05-4	ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO	5% - 12%
0163702-06-5	ETHOXYDIFLUOROMETHY-1,1,1,2,3,3,3-H	5% - 12%
0163702-07-6	NONAFLUORO-4-METHOXYBUTANE,1,1,1,2,	3% - 6%
0163702-08-7	2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane	3% - 6%

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Eliminate all ignition sources if safe to do so.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

IF exposed or concerned: Get medical advice/attention.

Eye Contact:

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position. Do not give anything.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Dry chemical, foam, carbon dioxide is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Do not direct a solid stream of water or foam into hot, burning pools this may results in frothing and increase fire intensity.

Unsuitable Extinguishing Media:

No data available.

Specific Hazards in Case of Fire:

Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Product is highly flammable and forms explosive mixtures with air, oxygen, and all oxidizing agents. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

During a fire, irritating and highly toxic gases may be generated during combustion or decomposition. High temperatures can cause sealed containers to rupture due to a build up of internal pressures. Cool with water.

DO NOT cut, drill, grind, or weld near full, partially full, or empty product containers.

Container could potentially burst or be punctured upon mechanical impact, releasing flammable vapors.

Fire-Fighting Procedures:

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch or walk through spilled material.

Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment:

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning Up:

Cover spills with inert absorbent and place in closed chemical waste containers.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen
1,2-DICHLOROETHYLENE												
ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO												
ETHOXYDIFLUOROMETHYL-1,1,1,2,2,3,3,3-H												
NONAFLUORO-4-METHOXYBUTANE,1,1,1,2,												

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
1,2-DICHLOROETHYLENE	200	793		
ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO		2.5		
ETHOXYDIFLUOROMETHYL-1,1,1,2,2,3,3,3-H		2.5		
NONAFLUORO-4-METHOXYBUTANE,1,1,1,2,		2.5		

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical Properties

Density	10.68995 lb/gal
Density VOC	7.40807 lb/gal
VOC Actual	887.70924 g/l
VOC Actual	7.40807 lb/gal
% VOC	69.29942%

Appearance	CLEAR LIQUID
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Odor Threshold	N.A.
Odor Description	PUNGENT SOLVENT
pH	N.A.
Flammability	N/A
Water Solubility	N.A.
Flash Point Symbol	N.A.
Flash Point	N.A.
Viscosity	N.A.
Lower Explosion Level	N.A.
Upper Explosion Level	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Freezing Point	N.A.
Melting Point	N.A.
Low Boiling Point	N.A.
High Boiling Point	N.A.
Auto Ignition Temp	N.A.
Evaporation Rate	N.A.
VOC Composite Partial Pressure	N.A.

SECTION 10) STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avoid:

Keep away from direct sunlight and other sources of ignition.
Dropping containers may cause bursting.

Hazardous Reactions/Polymerization:

Will not occur

Incompatible Materials:

Avoid strong oxidizers, reducers, acids, and alkalis.

Hazardous Decomposition Products:

No data available.

SECTION 11) TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation:

Prolonged or repeated contact with this product may dry and/or defat the skin. This product may be harmful if it is absorbed through the skin.

Causes skin irritation

Serious Eye Damage/Irritation:

Eye contact may lead to permanent damage if not treated promptly.

Liquid or vapors may irritate the eyes.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Eye contact may lead to permanent damage if not treated promptly.

Causes serious eye irritation

Respiratory/Skin Sensitization:

No Data Available

Germ Cell Mutagenicity:

No Data Available

Carcinogenicity:

No Data Available

Reproductive Toxicity:

No Data Available

Specific Target Organ Toxicity - Single Exposure:

No Data Available

Specific Target Organ Toxicity - Repeated Exposure:

Prolonged exposure may cause damage to her central nervous system, lungs, skin and eyes.

Aspiration Hazard:

No Data Available

Acute Toxicity:

If inhaled, may cause dizziness, nausea, upper respiratory irritation, drowsiness, mental depression or narcosis, difficulty in breathing, irregular heart beats.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

Harmful to aquatic life

Harmful to aquatic life with long lasting effects

Persistence and Degradability:

No data available.

Bio-accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Ground Transportation: (Continental United States, Canada & Mexico): Limited Quantity

IMDG Information:

Shipping Name: Aerosols

UN/NA #: 1950

Hazard Class: 2.2

Required Placard: Limited Quantity

Marine Pollutant: No data available

IATA Information:

We do NOT recommend this product to be shipped via air. It would need to be repacked by an authorized packing company and the DG would have to be completed by a licensed hazardous material shipping company.

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000156-60-5	1,2-DICHLOROETHYLENE	49% - 80%	DSL,CERCLA,SARA312,VOC,TSCA,RCRA
0163702-05-4	ETHOXY-1,1,2,2,3,3,4,4,4-NONAFLUORO	5% - 12%	DSL,SARA312,VOC_exempt,TSCA
0163702-06-5	ETHOXYDIFLUOROMETH Y-1,1,1,2,3,3,3-H	5% - 12%	DSL,SARA312,VOC_exempt,TSCA

0163702-07-6	NONAFLUORO-4-METHOXYBUTANE,1,1,1,2	3% - 6%	DSL,SARA312,VOC_exempt,TSCA
0163702-08-7	2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane	3% - 6%	DSL,SARA312,VOC_exempt,TSCA

SECTION 16) OTHER INFORMATION

Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

DISCLAIMER

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