1. IDENTIFICATION

Product identifier
Product Name: Food Safe Silicone Lubricant

Other means of identification
Product code: F-874
Synonyms: None

Recommended use of the chemical and restrictions on use
Recommended Use: Lubricant.
Uses advised against: No information available

Details of the supplier of the safety data sheet
Supplier Address
FRONTIER PERFORMANCE LUBRICANTS INC
PO BOX 1777
LODI, CA 95241
Phone: (800)-807-4496
Fax: (209)-334-6408

Emergency telephone number
Emergency Telephone: PERS (800)-633-8253

2. HAZARDS IDENTIFICATION

Physical hazards Flammable aerosols Category 1
Health hazards Aspiration hazard Category 1
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Signal word Danger
Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways.

Precautionary statement
Prevention Keep away from heat/sparks/open flames/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.
Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting.
Storage Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal Not available.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td></td>
<td>106-97-8</td>
<td>40 - 60</td>
</tr>
<tr>
<td>Propane</td>
<td></td>
<td>74-98-6</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Odorless Mineral Spirits</td>
<td></td>
<td>64741-65-7</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Polydimethylsiloxane</td>
<td></td>
<td>63148-62-9</td>
<td>2.5 – 10</td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact: Rinse skin with water/shower.
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do.
Ingestion: Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately.

5. FIRE-FIGHTING MEASURES


Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire-fighting equipment/instructions

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. In the event of fire and/or explosion do not breathe fumes.

General fire hazards: Extremely flammable aerosol

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe
7. HANDLING AND STORAGE

Precautions for safe handling
Do not handle or store near an open flame, heat or other sources of ignition. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not re-use empty containers. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Level 3 Aerosol.
Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Keep away from heat, sparks and open flame. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>TWA</td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>800 ppm</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Explosion-proof general and local exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection
Face shield is recommended. Wear safety glasses with side shields (or goggles).

Hand protection
Wear appropriate chemical resistant gloves.

Skin protection Other
Wear appropriate chemical resistant clothing.

Respiratory protection
If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear. Liquid.
Physical state: Gas.
Form: Aerosol.
Color: Colorless.
Odor: Mild. Solvent.
Odor threshold: Not available.
pH: Not available.
Melting point/freezing point: Not available.
Initial boiling point and boiling range: 347 °F (175 °C) estimated
Flash point: -156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Upper/lower flammability or explosive limits:
- Flammability limit – lower (%) 1 % estimated
- Flammability limit – upper (%) 7 % estimated
- Explosive limit - lower (%) Not available.
- Explosive limit - upper (%) Not available.
Vapor pressure: 60 - 70 psig @70F estimated
Vapor density: Not available.
Relative density: Not available.
Solubility (water): Not available.
Partition coefficient (n-octanol/water): Not available.
Auto-ignition temperature: 658 °F (347.78 °C) estimated
Decomposition temperature: Not available.
Viscosity: Not available.
Other information:
Specific gravity: 0.785 - 0.795 estimated

10. STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Hazardous decomposition products: No hazardous decomposition products are known.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

**Ingestion**
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung edema or pneumonia.

**Inhalation**
Not available.

**Skin contact**
No adverse effects due to skin contact are expected.

**Eye contact**
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Exposure may cause temporary irritation, redness, or discomfort. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death. Aspiration may cause pulmonary edema and pneumonitis.

Information on toxicological effects Acute toxicity
May be fatal if swallowed and enters airways. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 %, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 %, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>658 mg/l/4h</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**
Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**
Not a respiratory sensitizer.

**Respiratory sensitization**
This product is not expected to cause skin sensitization.

**Skin sensitization**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Germ cell mutagenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Carcinogenicity**
Not listed.

Not listed.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity -single exposure**
Not classified.

**Specific target organ toxicity -repeated exposure**
Not classified.

**Aspiration hazard**
May be fatal if swallowed and enters airways.
12. ECOLOGICAL INFORMATION

Ecotoxicity
Contains a substance which causes risk of hazardous effects to the environment. Harmful to aquatic life with long lasting effects.

Components | Species | Test Results
--- | --- | ---
Odorless Mineral Spirits (CAS 64741-65-7) | Aquatic |  
Aquatic Algae IC50 | Algae | 30000 mg/L, 72 Hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water (log Kow)
- Butane: 2.89
- Propane: 2.36

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT
- UN number: UN1950
- UN proper shipping name: Aerosols, flammable
- Transport hazard class(es):
  - Class: 2.1
  - Subsidiary risk: -
  - Label(s): 2.1
- Packing group: Not applicable.
- Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
- Special provisions: N82
- Packaging exceptions: 306
- Packaging non bulk: None
- Packaging bulk: None
This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the “Consumer Commodity - ORM-D” marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the “Consumer Commodity ORM-D” marking and both may be displayed concurrently.

IATA
UN number UN1950
UN proper shipping name Aerosols, flammable
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group Not applicable.
Environmental hazards No.
ERG Code 10L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Passenger and cargo aircraft Allowed.
Other information
Cargo aircraft only Allowed.
Packaging Exceptions LTD QTY

IMDG
UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group Not applicable.
Environmental hazards Marine pollutant No.
EmS F-D, S-U
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions LTD QTY
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

DOT

IATA; IMDG
15. REGULATORY INFORMATION

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. Massachusetts RTK - Substance List
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. Rhode Island RTK
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.
### International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>(yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

---

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>8/15/2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Date</td>
<td>8/15/2015</td>
</tr>
<tr>
<td>Revision Note</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet