1. Identification

Product number 100009634
Product identifier TERAND PENETRATING LUBRICANT WITH PTFE
Company information CPC
1005 S. Westgate Drive
Addison, IL 60101 United States
Company phone General Assistance 630-543-7600
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 01
Recommended use Lubricant
Recommended restrictions None known.

2. Hazard(s) 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 Wash hands after handling. 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 Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container in accordance with local/regional/national/international regulations.
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>Distillates, Petroleum, Hydrotreated Middle</td>
<td></td>
<td>64742-46-7</td>
<td>20 - 40</td>
</tr>
<tr>
<td>White Mineral Oil (petroleum)</td>
<td></td>
<td>8042-47-5</td>
<td>20 - 40</td>
</tr>
<tr>
<td>Butane</td>
<td></td>
<td>106-97-8</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether</td>
<td></td>
<td>112-34-5</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Propane</td>
<td></td>
<td>74-98-6</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>10 - 20</td>
</tr>
</tbody>
</table>
4. First-aid measures

**Inhalation**
If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

**Skin contact**
Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**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**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

**Suitable extinguishing media**
Water fog. Dry chemical powder. Dry chemicals. Carbon dioxide (CO2).

**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. During fire, gases hazardous to health may be formed.

**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. Cool containers exposed to heat with water spray and remove container, if no risk is involved. 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.

**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 and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

**Precautions for safe handling**
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 prolonged or repeated contact with skin. Avoid prolonged exposure. Provide adequate ventilation. 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. 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. 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>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>STEL</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Diethylene Glycol</td>
<td>TWA</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>Monobutyl Ether (CAS 112-34-5)</td>
<td></td>
<td>Inhalable fraction and vapor.</td>
<td></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>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m3</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. Good general ventilation (typically 10 air changes per hour) 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.

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

Wear suitable protective clothing.

Respiratory protection

If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state: Gas.
Form: Aerosol.
Color: Not available.
Odor: Not available.
Odor threshold: Not available.

pH: 6 - 7

Melting point/freezing point: Not available.
Initial boiling point and boiling range: 583.11 °F (306.17 °C) estimated
Flash point: -156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate
Flammability (solid, gas)
Upper/lower flammability or explosive limits
  Flammability limit - lower (%)
  1.1 % estimated
  Flammability limit - upper (%)
  7.8 % estimated
  Explosive limit - lower (%)
  Not available.
  Explosive limit - upper (%)
  Not available.
Vapor pressure
Vapor density
Relative density
Solubility(ies)
  Solubility (water)
  Not available.
Partition coefficient (n-octanol/water)
Auto-ignition temperature
702.59 °F (372.55 °C) estimated
Decomposition temperature
Not available.
Viscosity
Other information
  Specific gravity
  0.781 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. Fire or intense heat may cause violent rupture of packages.
Incompatible materials
Hazardous decomposition products
  No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
  Ingestion
  Expected to be a low ingestion hazard. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
  Inhalation
  Prolonged inhalation may be harmful.
  Skin contact
  No adverse effects due to skin contact are expected.
  Eye contact
  Not available.
Symptoms related to the physical, chemical and toxicological characteristics
  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>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERAND PENETRATING LUBRICANT WITH PTFE (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>13593 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>1099 mg/l/4h</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>Acute</td>
<td>Inhalation Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether (CAS 112-34-5)</td>
<td>Acute</td>
<td>Dermal Rabbit 2764 mg/kg, 24 Hours Rat 2021 mg/kg Inhalation LC50 Rat 74 mg/l/4h Oral LD100 Rabbit 4000 mg/kg LD50 Guinea pig Mouse 2410 mg/kg Rabbit 2500 - 3000 mg/kg Rat 3306 mg/kg</td>
</tr>
<tr>
<td>Distillates, Petroleum, Hydrotreated Middle (CAS 64742-46-7)</td>
<td>Acute</td>
<td>Dermal Rabbit &gt; 2000 mg/kg, 24 Hours Inhalation LC50 Rat 7640 mg/m3, 4 Hours 1.72 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>Acute</td>
<td>Inhalation Mouse 1237 mg/l, 120 Minutes 52 %, 120 Minutes Rat 1355 mg/l 658 mg/l/4h</td>
</tr>
<tr>
<td>White Mineral Oil (petroleum) (CAS 8042-47-5)</td>
<td>Acute</td>
<td>Dermal Rabbit &gt; 2000 mg/kg, 24 Hours Inhalation LC50 Rat 2.18 mg/l, 4 Hours</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**
- Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization**
- Not a respiratory sensitizer.

**Skin sensitization**
- This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**
- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- Risk of cancer cannot be excluded with prolonged exposure.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

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.

**Chronic effects**
Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

**Ecotoxicity**
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Product Test Results</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERAND PENETRATING LUBRICANT WITH PTFE (CAS Mixture)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Components</td>
<td>Species</td>
</tr>
<tr>
<td>Diethylene Glycol Monobutyl Ether (CAS 112-34-5)</td>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td></td>
</tr>
</tbody>
</table>

* 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
- Diethylene Glycol Monobutyl Ether: 0.56
- 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)**: 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 
Packing exceptions: 306 
Packing non bulk: None 
Packing 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. 
Other information: 
Passenger and cargo aircraft: Allowed. 
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: Not available. 
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

DOT 
Product name: TERAND PENETRATING LUBRICANT WITH PTFE 
Product #: 1000009634 
Version #: 01 
Issue date: 10-13-2015
15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
CERCLA/SARA Hazardous Substances - Not applicable.

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)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-butoxyethanol</td>
<td>111-76-2</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

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
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</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>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</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>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</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, including date of preparation or last revision

Issue date: 10-13-2015
Version #: 01

Disclaimer
The information provided in this 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.