

Safety Data Sheet

TorrLube Extreme Grease and High Temp Purity Grease

Section I. Material Identification

Product Name: Extreme Grease and High Temp Purity Grease
Chemical Family: Synthetic Lubricating Grease
Manufacturer: The TorrLube Company, LLC
3769 Constellation Rd., Suite F
Vandenberg Village, CA 93436
Emergency Phone Number: 805-733-1476
Date: 12-02-2023 (Revision Date: 01-01-2025)

Section II. Hazards Identification

GHS Classification: None
GHS Label Elements:
Hazard Pictograms: None
Signal Word: None
Hazard Statements: None
Precautionary Statements: P260 Do not breathe dust, mist or vapors.
P281 Use personal protective equipment as required.
P314 Get medical attention if you feel unwell.
P402 + P404 Store in a dry place, in a closed container.
P501 Dispose of content and container according to local and national regulations.

Section III. Composition

<u>CAS Number</u>	<u>Chemical Name</u>	<u>Content by Mass</u>
60164-51-4	Perfluoropolyether fluid	>70%
9002-84-0	Polytetrafluoroethylene	<30%
17265-14-4	Disodium sebacate	2%

Section IV: First Aid Measures

Eye Contact:	Flush thoroughly with clear water for 15 minutes or until irritation subsides. Contact physician.
Skin Contact:	Wash with soap and water. Remove any contaminated clothing and wash with soap and warm water. Get medical attention if symptoms occur.
Inhalation:	Move to fresh air and refer to a physician for treatment.
Injection:	Consult physician immediately.
Ingestion:	Contact physician immediately.
Other:	Exercise ordinary measures of personal hygiene.

Section V: Fire Fighting Measures

Extinguishing Media: Dry chemical, CO₂, foam, or sand/earth.

Unusual Fire or Explosion Hazards: Dense smoke can form in a fire. In a fire, decomposition of fluorinated compounds can generate hydrogen fluoride, fluorophosgene, and carbonyl fluoride. Empty containers contain residue. Do not cut, drill, grind or weld as they may explode.

Special Fire Fighting Measures: Avoid smoke inhalation. Water or foam may cause frothing. Cool exposed containers with water. Use air supplied rescue equipment for enclosed areas.

Section VI: Accidental Release Measures

Spill or Leak Procedures: Wipe or scrape up spillage and place it in a container for disposal. Product may be absorbed with an inert material such as sand, soil, or vermiculite. Wash walking surfaces thoroughly with detergent and water to reduce slipping hazard. Keep petroleum products out of sewers and water courses. Advise authorities if product has or may enter sewers or water courses.

Waste Management and Disposal: Assure conformity with applicable regulations. Consult local, state and federal regulations applicable to your area.

Section VII: Handling and Storage

Handling: Avoid contact with skin and eyes. Enforce No Smoking in areas where fluoropolymers are handled or stored. Use with adequate ventilation. Avoid breathing if this material is atomized in a mist.

General Hygiene Advice: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Storage: Keep container closed and in a dry, well-ventilated place.

Section VIII: Exposure Controls and Personal Protection

Control Parameters:

Exposure Guidelines: Particulates Not Otherwise Regulated (PNOR)

OSHA PEL: 15 mg/m³ (Total Dust), 5 mg/m³ (Respirable Particulate)

ACGIH TLV: 10 mg/m³ (Inhalable Particulate)

Exposure Controls:

Ventilation: None required unless mists, smoke or vapors are produced at high temperatures.

Personal Protective Equipment:

Goggles: Safety glasses recommended.

Gloves: Oil resistant gloves recommended, especially to avoid prolonged or repeated skin contact.

Respirator: Not required unless mists, smoke or vapors are produced at high temperatures.

Other: Use oil resistant apron, if needed.

Section IX: Physical and Chemical Properties

Appearance:	Grease Like
Color:	White
Odor:	None
Odor Threshold:	Not Available
Physical State:	Solid, liquid can evolve under certain conditions
pH:	Not Applicable
Melting Point:	>300°C
Initial Boiling Point:	>300°C
Flash Point:	None
Auto-ignition Temperature:	None
Evaporation Rate:	Negligible
Lower Explosive Limit:	None
Upper Explosive Limit:	None
Vapor Pressure:	Negligible
Vapor Density:	Not available
Specific Gravity:	1.89 at 25°C
Solubility in Water:	Insoluble
Partition Coefficient:	Not available
Decomposition Temperature:	Not Available
Viscosity:	Semi-solid. Viscosity varies with shear rate.

Section X: Stability and Reactivity

Reactivity: Stable

Hazardous Polymerization: Will not occur.

Chemical Incompatibilities: Avoid contact with strong oxidants, such as liquid chlorine and concentrated oxygen.

Hazardous Decomposition Products: Burning may produce carbon monoxide, carbon dioxide hydrogen fluoride, fluorophosgene, carbonyl fluoride and other fumes.

Other: Avoid contamination of cigarettes or other tobacco products.

Section XI: Toxicological Information

Perfluoropolyether oil:

Acute Oral LD50 (rat) > 37,400 mg/kg

Acute Dermal ALD (rabbit) > 17,000 mg/kg

Inhalation: ALC (rat) > 19.54 mg/l, 4h

Thermal decomposition (above 300°C) can cause polymer fume fever with flu-like symptoms in humans.

Skin: Irritation (rabbit): Not classified as irritant, slight irritation

Sensitization (human): Not a skin sensitizer. Patch test on human volunteers did not demonstrate sensitization properties. Modified Draize Test.

Eye: Irritation (rabbit): Not classified as irritant, slight irritation.

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity: No components classifiable as a human carcinogen.

Aspiration hazard: Not classified

Polytetrafluoroethylene:

Acute Oral LD50 (rat) >11,280 mg/kg

Inhalation: Thermal decomposition (above 300°C) can cause polymer fume fever with flu-like symptoms in humans.

Skin: Irritation (rabbit): No skin irritation. (human) No skin irritation.

Sensitization: (human): Does not cause skin sensitization.

Repeated dose toxicity, oral (rat): No toxicologically significant effects were found.

Mutagenicity: Tests on bacterial and mammalian cell cultures did not show mutagenic effects.

Carcinogenicity: Not classifiable as a human carcinogen.

Reproductive Toxicity: No toxicity to reproduction.

STOT single exposure: Not classified

STOT repeated exposure: Not classified

Aspiration hazard: Not classified

Disodium sebacate:

Acute Oral LD50 (rat) >6,000 mg/kg

Acute Intraperitoneal LD50 (rat) 5,500 mg/kg

Acute Intravenous LD50 (rat) 560 mg/kg

Acute Oral LD50 (rabbit) >6,000 mg/kg

Acute Intraperitoneal LD50 (rabbit) 6,000 mg/kg

Acute Intravenous LD50 (rabbit) 1,440 mg/kg

Chronic: Repeated administration to rats produced no significant differences in biological parameters.

Teratogenicity: No effects observed for teratogenicity, fetal toxicity, or neonatal effects.

Carcinogenicity: Not listed by OSHA, ACGIH, NTP, IARC

Section XII: Ecological Information

Perfluoropolyether oil:

Acute LC50 (oncorhynchus mykiss): >1,000 mg/l

Acute LC50 (daphnia magna): >1,000 mg/l

This substance is a polymer and is not expected to produce toxic effects.

Persistence and degradability: Not readily biodegradable.

Polytetrafluoroethylene:

Polymer, not expected to produce toxic effects.

Disodium sebacate:

Acute LC50 (bluegill): >100 ppm, 96h

Acute LC50 (carp) >100 ppm, 96h

Acute LC50 (catfish) >100 ppm, 96h

Acute LC50 (rainbow trout) >100 ppm, 96h

Sebacic acid is readily biodegradable.

Section XIII: Disposal Considerations

According to RCRA (40 CFR 261), this material is not hazardous waste when the as received lubricant is discarded.

Dispose of in accordance with all local, state, provincial, and federal regulations.

Section XIV: Transport Information

DOT (49 CFR 171.101): Not hazardous

IMDG (ocean): Not hazardous

IATA (air): Not hazardous

Section XV: Regulatory Information

Contents of this MSDS comply with OSHA HAZARD Communication Standard 29 CFR 1910.1200.

EPA SARA Title III Chemical Listing:

This product contains no extremely hazardous or hazardous substances.

CERCLA Hazardous Substances: None

TSCA Status: All chemical substances listed are included or exempt from listing on TSCA.

Section XVI: Other Information

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, The TorrLube Company, LLC makes no warranty with respect thereto and disclaims all liability with respect thereon.