

## Safety Data Sheet

### TorrLube Solvent

This Safety Data Sheet adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements of other countries.

### Section I. Material Identification

Product Name	TorrLube Solvent
Chemical Family	Fluorinated Solvent
Manufacturer	The TorrLube Company, LLC 3769 Constellation Rd., Suite F Vandenberg Village, CA 93436
Emergency Phone Number	805-733-1476
Date	11-17-2023

### 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>
297730-93-9	3 ethoxy, 1,1,1,2,3,4,4,5,5,6,6,6 dodecafluoro 2 trifluoromethyl hexane	>99%

## Section IV: First Aid Measures

<b>Eye Contact:</b>	Flush thoroughly with clear water for 15 minutes or until irritation subsides. Remove contact lenses if easy to do. If signs or symptoms persist, get medical attention.
<b>Skin Contact:</b>	Wash with soap and water. Remove any contaminated clothing and wash with soap and warm water. Get medical attention if symptoms occur.
<b>Inhalation:</b>	Move to fresh air. If you feel unwell, get medical attention.
<b>Injection:</b>	Consult physician immediately.
<b>Ingestion:</b>	Rinse mouth. Do not induce vomiting. Contact physician immediately.
<b>Other:</b>	Exercise ordinary measures of personal hygiene.

## Section V: Fire Fighting Measures

**Extinguishing Media:** Non-combustable. Use material suitable for the surrounding fire.

**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 carbon monoxide.

**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:** Ventilate area with fresh air. 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 surfaces thoroughly with detergent and water to reduce slipping hazard. Keep 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.

**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. Store away from heat, acids, and strong bases.

## Section VIII: Exposure Controls and Personal Protection

### Control Parameters:

Exposure Guidelines: Fluorinated solvent (297730-93-0)

Manufacturer determined TWA: 100 ppm

### Exposure Controls:

Ventilation: Provide local exhaust if product is heated. In situations where the product may be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Exposure Limits and to control mist.

### 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 or if vapor concentration exceeds Exposure Limits.

Other: Use oil resistant apron, if needed.

## Section IX: Physical and Chemical Properties

Appearance:	Liquid
Color:	Colorless
Odor:	None
Odor Threshold:	Not Available
Physical State:	Liquid
pH:	Not Applicable
Melting Point:	-100°C
Initial Boiling Point:	129°C
Flash Point:	None
Auto-ignition Temperature:	None
Evaporation Rate:	No data available
Lower Explosive Limit:	None
Upper Explosive Limit:	None
Vapor Pressure:	7 mmHg at 20°C
Vapor Density:	14.3 (Air+1)
Specific Gravity:	1.63 at 20°C
Solubility in Water:	<0.004 ppm - solvent
Partition Coefficient:	5.75
Autoignition Temperature:	330°C
Decomposition Temperature:	Not Available
Viscosity:	0.8 cSt at 25°C

## Section X: Stability and Reactivity

**Reactivity:** Stable

**Hazardous Polymerization:** Will not occur.

**Chemical Incompatibilities:** Avoid contact with strong oxidizing agents, strong acids and strong bases.

**Hazardous Decomposition Products:** Burning may produce hydrogen fluoride, irritating/toxic vapors or gases, and other fumes.

**Other:** Avoid contamination of cigarettes or other tobacco products.

## Section XI: Toxicological Information

3-ethoxy 1,1,1,2,3,4,4,5,5,6,6,6 dodecafluoro 2-trifluoromethyl hexane:

Acute Oral LD50 (rat) >2,000mg/kg

Inhalation (4 hours) LD50 (rat) >50 mg/l

Acute Dermal LD50 (rat) >2,000mg/kg

Skin: Irritation (rabbit): No significant irritation

Sensitization (guinea pig): Non-sensitizing

Eye damage/irritation (rabbit): No significant irritation

Respiratory sensitization: No data/not classified

Germ cell Mutagenicity: Non mutagenic in vitro

Carcinogenicity: No data/not classified

Reproductive toxicity: Ingestion (rat, m/f) NOAEL 1,000 mg/kg/day pre mating & during gestation

Inhalation (rat,m) NOAEL 169 mg/l, 5 days, not toxic

Target Organs:

Inhalation, respiratory irritation (rat) LOAEL 207 mg/l, 5 days, all data are negative.

Inhalation, liver kidney and/or bladder (rat) NOAEL 169 mg/l, 5 days, some positive data exist, but the data are not sufficient for classification.

Ingestion, heart, endocrine system, hematopoietic system, immune system, nervous system, eyes, kidney/bladder, respiratory system (rat) NOAEL 1,000 mg/kg/day 28 days, all data are negative.

## Section XII: Ecological Information

3-ethoxy 1,1,1,2,3,4,4,5,5,6,6,6 dodecafluoro 2-trifluoromethyl hexane:

Contact The TorrLube Company, LLC for additional ecotoxicological information on this component.

## 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.