

# Material Safety Data Sheet

**TEF-GEL**

Date of Preparation: 2/20/99

Revision Date: 01/01/2011

## Section 1 – Chemical Product and Company Identification

**Product/Chemical Name:** Tef-Gel

**General Use:** Anti-sieze Lubricant

**Manufacturer:** Ultra Safety Systems

1601 Hill Avenue, Suite C

Mangonia Park Fl 33407

Telephone: (561) 845-1086 (8:00AM – 5:00PM)

Nights and Weekends: (561) 584-0504

## Section 2 – Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % volume
Polytetrafluoroethylene, PTFE*	9002-84-0	40.0

Product formulation is Proprietary

No Ingredients are known to be hazardous under normal usage.

\*Not a hazardous material under normal usage, but PTFE can produce toxic fumes if pyrolyzed.

Ingredients	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Oil Mist	5 mg/m <sup>3</sup>	None Established	5 mg/m <sup>3</sup>	None Established	5 mg/m <sup>3</sup>	None Established	2500 mg/m <sup>3</sup>

## Section 3 – Hazards Identification

### \*\*\*\*\*EMERGENCY OVERVIEW\*\*\*\*\*

**Summary of Risks:** May irritate eyes. Prolonged or repeated skin contact may cause irritation. Inhalation of Oil mist or vapors from material at high temperatures may irritate respiratory passages.

Polytetrafluoroethylene (PTFE), when thermally decomposed (over 290<sup>o</sup>C), may cause polymer fume fever.

Thermal decomposition of PTFE (over 290<sup>o</sup>C) will generate hydrogen fluoride.

<b>HMIS</b>
<b>H 1</b>
<b>F 1</b>
<b>R 0</b>
<b>PPE<sup>†</sup></b>
<sup>†</sup> Sec. 8

### POTENTIAL HEALTH EFFECTS

**Eye Contact:** May cause irritation.

**Skin Contact:** Repeated or prolonged skin contact may cause irritation. Thermal decomposition of PTFE (over 290<sup>o</sup>C) will generate hydrogen fluoride, which is corrosive, causing burns on contact with skin and other tissue.

**Inhalation:** Oil Mist and vapors at high temperatures may irritate respiratory passages. Inhalation of decomposition products of PTFE (over 290<sup>o</sup>C) may cause polymer fume fever, a temporary flu-like illness accompanied by fever, chills, and sometimes cough, of approximately 24 hours duration. Repeated episodes of polymer fume fever may cause lung damage. Inhalation of fluorine compounds as decomposition products of PTFE (over 290<sup>o</sup>C) may cause lung irritation and pulmonary edema.

**Ingestion:** May cause gastrointestinal irritation.

**Primary Route(s) of Entry:** Inhalation at high temperatures, eye contact, skin contact.

**Target Organs:** Respiratory passages at high temperatures, eyes, skin.

**Medical Conditions Aggravated by Long-Term Exposure:** Individuals with pre-existing diseases of the lungs may have increases susceptibility to the toxicity of excessive exposures from thermal decomposition products.

**Carcinogenicity:** IARC, NTP, and OSHA do not list TEF-GEL or its ingredients as carcinogens.

## Section 4 – First Aid Measures

**Eye Contact:** Flush thoroughly with water for at least 15 minutes. Get immediate medical attention.

**Skin Contact:** Remove contaminated clothing. Wash exposed area with soap and water. Get medical attention if symptoms persists.

**Inhalation:** If symptoms develop, remove affected person from source of exposure into fresh air. Get immediate medical attention.

If person is not breathing, give artificial respiration. If breathing is difficult, administer oxygen if available.

**Ingestion:** Get immediate medical attention. Do not induce vomiting unless instructed to do so by a physician.

## Section 5 – Fire – Fighting Measures

**Flash Point:** over 400° F (204°C)

**Flash Point Method:** CC, ASTM D93

**Lower Flammable Limit (LFL):** N/A

**Upper Flammable Limit (UFL):** N/A

**Extinguishing Media:** CO<sub>2</sub>, Foam, Dry Chemical, Water Spray

**Unusual Fire or Explosion Hazards:** None

**Hazardous Combustion Products:** Hydrogen fluoride, carbonyl fluoride, carbon monoxide and small amount of other toxic fumes

**Fire-Fighting Instructions:** Wear a NIOSH approved positive pressure self-contained breathing apparatus with full protective clothing. Do not release runoff from fire control methods to sewers or waterways.

## Section 6 – Accidental Release Measures

**Spill Response:** Observe precautions from other sections. Contain any spill with dikes or absorbents to prevent migration and entry into drains, sewers or bodies of water. Wipe or scrape up grease and place it in a proper container for disposal. Wash walking surfaces thoroughly to reduce slipping hazard. Follow applicable OSHA (29 CFR 1910.120), state and local regulations.

## Section 7 – Handling and Storage

**Handling Precautions:** Exercise ordinary care in handling industrial lubricants. Avoid contamination of cigarettes or other tobacco products. Wash hands thoroughly before eating or smoking. Remove contaminated clothing and clean before reuse.

Users should be alert to the possibility that very small percentages of the population may display unexpected allergic reactions to otherwise innocuous industrial lubricants and raw materials.

**Storage Requirements:** Do not store in open or unlabeled containers. Store away from incompatibles.

## Section 8 – Exposure Controls / Personal Protection

**Eye Protection:** Avoid eye contact. Wear safety glasses or chemical goggles in accordance with OSHA 29 CFR 1910.133.

**Skin Protection:** Avoid skin contact. Wear chemical protective gloves. Depending upon conditions of use, additional protection may be necessary such as a face shield, apron, etc.

**Ventilation:** Local ventilation is generally not necessary under normal conditions of use with adequate general ventilation.

Ventilation and other forms of engineering controls are preferred means for controlling chemical exposures.

**Respiratory Protection:** Avoid breathing oil mist. Respiratory protection is generally not necessary under normal condition of use with adequate general ventilation.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Other Precautionary Information:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

## Section 9 – Physical and Chemical Properties

**Appearance and Odor:** Smooth, white grease with slight odor

**Vapor Pressure:** Negligible

**Vapor Density:** Not Determined

**Formula Weight:** Not Calculated

**Specific Gravity (H<sub>2</sub>O=1, at 4°C):** Not Determined

**Water Solubility:** Insoluble

**Boiling Point:** Not Volatile

**Dropping Point:** Non-melting

**% Volatile:** None

**pH:** Not Determined

## Section 10 – Stability and Reactivity

**Stability:** Tef-Gel is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** This product will not undergo hazardous polymerization.

**Chemical Incompatibilities:** Strong oxidizing materials.

**Conditions to Avoid:** Pyrolysis

**Hazardous Decomposition Products:** Thermal oxidative decomposition of Tef-Gel can produce hydrogen fluoride, carbonyl fluoride, carbon monoxide as well as small amounts of other toxic fumes.

## Section 11 – Toxicological Information

**Toxicity Data:** None Available

## Section 12 – Ecological Information

**Environmental Fate and Effects:** No data has been established for this product.

## Section 13 – Disposal Considerations

**Disposal:** Contact a licensed waste-disposal contractor for detailed recommendations.

**Disposal Regulatory Requirements:** Many states classify waste lubricants as “hazardous”, which means disposal only by a licensed firm. Follow applicable Federal, state, and local regulations.

## Section 14 – Transport Information

**DOT Transportation Data (49 CFR 172.101):** Not Regulated.

## Section 15 – Regulatory Information

**TSCA:** All components of this product are listed on the TSCA inventory.

### **EPA Regulations:**

#### SARA 311/312 Hazard Class (40 CFR 370)

Immediate (Acute) Health Hazard	No	Sudden Release of Pressure Hazard	No	Reactive Hazard	No
Delayed (Chronic) Health Hazard	No	Fire Hazard	No		

#### SARA 313 Toxic Chemicals (40 CFR 372)

	<u>CAS Number</u>	<u>%</u>	
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No Ingredients Listed

#### SARA Extremely Hazardous Substances (40 CFR 355)

	<u>CAS Number</u>	<u>%</u>	<u>Threshold Planning Quantity (TPO)</u>
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No Ingredients Listed

#### CERCLA Hazardous Substances (40 CFR 302)

	<u>CAS Number</u>	<u>%</u>	<u>Reportable Quantity (RO)</u>
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No Ingredients Listed

## Section 16 – Other Information

**SHELF LIFE: INDEFINITE or UNLIMITED**

**Disclaimer:** While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Ultra Safety Systems, Inc. makes no warranty with respect thereto and disclaims all liability with respect thereon.