Material Safety Data Sheet

May be used to comply with OSHA's ,Hazard Communication Standard.
29 CFR 1910. 1200 Standard must be consulted for specific requirements.

Tribolube EPO2

SECTION 1- MANUFACTURER

Manufacturer's Name	**Aerospace Lubricants, Inc**	
Address	**1600 Georgesville Road**	Emergency Telephone No. **614-878-3600**
City, State, and Zip	**Columbus, Ohio 43228**	Other Information Calls **614-878-3600**
Signature of Person Responsible for Preparation	*Stephen E. Gates* (signature)	Date Prepared **January 3, 2006** **Rev. D**

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

SECTION 2- HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (chemical & common name(s))	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO.
Composition Information: Propene, 1, 1, 2, 3, 3, 3- hexa-fluoro, oxidized, polymerized				100%	69991-67-9

No hazardous components were knowingly incorporated into this solvent. This product is not considered hazardous according to the OSHA

Hazardous Communication Standard 29CFR 1910.1200

Threshold Limit Value: LD50>40G/KG (Non-toxic)

OSHA Threshold Limit Value: LD50>40G/KG

ACGIH Threshold Limit Value: LD50>40G/KG

Carcinogen - NTP Program: N/A

Carcinogen - IARC Program: N/A

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point 90ºC	Specific Gravity (H O=1) 1.78	Vapor Pressure (mm Hg) 100 torr @ 25ºC
Vapor Density (Air=1) N/A		
Solubility in Water 14 ppm	Reactivity in Water Non-reactive	
Appearance and Odor Clear, Odorless Liquid	Melting Point NA	

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point N/A	Method Used N/A	Flammable Limits in Air % by Volume N/A	LEL Lower N/A	UEL Upper N/A
Auto-Ignition Temperature Nonflammable	Extinguisher Media N/A			

Special Fire Fighting Procedures   Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Decomposition at temperatures above 290ºC may cause the evolution of toxic gasoeus fluorine compounds.

Unusual Fire and Explosion Hazards   Toxic fluorine gases are by-products of combustion.

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Tribolube EPO2

Stability	Unstable ☐	Conditions to Avoid	
	Stable ☒		Avoid heating above 250ºC.

Incompatability (Materials to Avoid — Molten alkali metals, interhalogen compounds, strong or nonaqueous alkali and Lewis acids above 100ºC

Hazardous Decomposition Products — HF and COF_2 (both toxic*) from thermal decomposition in air (at temperatures greater than 290ºC

Hazardous polymerization	May Occur ☐	Conditions to Avoid	
	Will Not Occur ☒		Avoid heating above 250ºC

* HF-Hydrogen fluoride has TVL/TWA=2.5mg/m³;
COF_2-Carbonyl fluoride has TVL/TWA=5mg/m³

SECTION 6 - HEALTH HAZARDS

1. Acute	2. Chronic
None	None

Signs and Symptom of Exposure — Mild irritant to the skin upon prolonged exposure for some individuals.

Decomposition products formed at high temperatures above 250ºC may cause "polymer fever."

Medical Condition Generally Aggravated by Exposure — No known medical condition that might be aggravated by exposure.

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes ☐ No ☒	I.A.R.C. Monographs	Yes ☐ No ☒	OSHA	Yes ☐ No ☒
None						

Emergency and First Aid Procedures — See below

ROUTES OF ENTRY

1. Inhalation — Slightly toxic by inhalation (4 hr. LC 50 1,000-5000 ppm; 8-40 mg/l). If discomfort occurs, move to fresh air; contact physician.

2. Eyes — Flush with water; if irritated, contact physician.

3. Skin — Wipe off and wash with soap and water. If irritation develops, contact physician.
Very low toxicity by contact (LD50> 10.00 mg/kg)

4. Ingestion — Very low toxicity by ingestion (oral LD50>5,000 mg/kg). Give large amounts of water; contact physician. Inform physician product is inert/non-toxic.

SECTION 7 -SPECIAL PRECAUTION AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage — Use reasonable care. Do not store above 250ºF or near flammables or explosive material.

Other Precautions — Toxic vapors may evolve above 250ºC; provide adequate ventilation if used above this temperature.

Avoid spills; causes slippery surfaces.

Steps to be Taken in Case Material is Released or Spilled — Scrape up with proper tools; wipe up with absorbant cloth or paper towel; apply non-skid absorbant material to floor. Collect waste materials for salvage or disposal.

Waste Disposal Methods (Consult federal, state, and local regulations) — Dispose of in accordance with current Federal, State, and Local Regulations.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type) — Not required unless product is being used as a mist.

Ventilation	Local Exhaust	Mechanical (General)	Special	Other
Recommended	Not required	Recommended	Not required	

Protective Gloves — Plastic disposable   **Eye Protection** — Safety glasses recommended

Other Protective Clothing or Equipment — Plastic apron, fabric laboratory coat recommended.

Work/Hygienic Practices — Do not contaminate smoking materials; wash hands and / or contaminated area after exposure.