

ETI HFE - 347

SAFETY DATA SHEET

Preparation Date: January 5, 2022 Revision: 3 Replaces March 15, 2022

1. Product and Company Identification

Product Name: **ETI HFE - 347**
Identified Uses: Specialty Fluorinated Solvent. **FOR INDUSTRIAL USE ONLY. NOT FOR CONSUMER USE.**
Supplier: Enviro Tech International, Inc.
1800 N. 25th Ave.
Melrose Park, IL 60160 708-343-6641
www.envirotechint.com
Contact Person: sales@envirotechint.com
Emergency Contact: Velocity EHS 24-HR EMERGENCY U.S., Canada, Puerto Rico, U.S. Virgin Islands
(800) 255-3924 INTERNATIONAL CALLS: +01-813-248-0585
Non-emergency number: +01-708-343-6641 (US)

2. HAZARD IDENTIFICATION

Signal Word: **Warning**

Classification

Skin irritation Category 2
Eye irritation Category 2
Specific Target Organ Toxicity Category 3 (narcotic effects)



Hazard Statements

H315 Causes skin irritation
H320 Causes eye irritation
H336 May cause drowsiness or dizziness.

General & Prevention Precautionary Statements

P102 Keep out of reach of children
P103 Read label before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking
P233 Keep container tightly closed
P234 Keep only in original container
P260 Do not breathe mist/vapors
P262 Do not get in eyes, on skin, or on clothing
P270 Do not eat, drink or smoke when using this product
P271 Use in a well-ventilated area
P280 Wear protective gloves/eye protection/face protection
P281 Use personal protective equipment as required.
P285 In case of inadequate ventilation wear respiratory protection

Precautionary Statements

P308 + P314 IF EXPOSED: Get medical advice/attention if you feel concerned.
P305 + P351 + P338 + P337 + P313 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
P302 + P361 + P352 + P353 + P363 IF ON SKIN: remove immediately all contaminated clothing. Wash with soap and water. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
P333 + P313
P304 + P340 + P342 + P311 IF INHALED: Remove individual to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P301 +P330 + P331

IF SWALLOWED: rinse mouth. Not known to be hazardous by ingestion, but consult a physician. Do NOT induce vomiting as aspiration hazard is considered a greater hazard than swallowing.

P306 + P361 + P363

IF ON CLOTHING: Remove immediately all contaminated clothing. Wash contaminated clothing.

Storage & Disposal:

P403 + P233 + P235 + P404

Store in a well-ventilated place. Keep container tightly closed. Keep Cool. Do not store in direct sunlight.

P501

Dispose of contents/containers in accordance with all local/regional/national/international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

1, 1,2, 2 - Tetrafluoroethyl-2,2,2-trifluoroethylether CAS 406-78-0 > 99%

4. FIRST AID MEASURES

- Inhalation: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion: Compound is not known to be hazardous by ingestion. Do not induce vomiting due to aspiration hazards. Never give liquid to an unconscious person. Get medical attention.
- Skin Contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
- Eye Contact: Immediately flush eyes with plenty of water while lifting the eye lids. Remove contact lenses, if worn. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES

- Flash point (° C): None - ASTM 56 (See Section 9)
- Extinguishing Media: Use extinguishing measures appropriate to local circumstances and surroundings such as dry chemical, carbon dioxide, water spray mist, foam.
- Unsuitable extinguishing media: None
- Hazardous combustion products: Containers may rupture under high heat conditions. Hydrogen fluoride, carbon monoxide and carbon dioxide.
- Special Fire Fighting Procedures: Avoid breathing fire vapors. Keep run-off water out of sewers and water sources. Dike for water control.
- Protective Equipment: Self-contained breathing apparatus (SCBA) and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions: Wear protective clothing as described in Section 8 of this Safety Data Sheet. Ensure adequate ventilation.
- Environmental Precautions: Do not discharge into drains, water courses or onto the ground. Contain spillages with sand, earth or any suitable adsorbent material.
- Spill Clean Up Methods: Provide ventilation and confine spill. Do not allow runoff to sewer. Dam and absorb spillage with sand, sawdust or other absorbent.

Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Reference to other Sections: For personal protection, see Section 8. For waste disposal, see Section 13.

7. HANDLING AND STORAGE

Handling: Avoid spilling, skin and eye contact. Avoid inhalation of vapors and spray mists. Use with sufficient ventilation. Do not allow contact with open flame. Vapor reduces available oxygen for breathing and is heavier than air.

Storage: Store in tightly closed original container in a dry, cool and well-ventilated place at room temperature. Avoid storing in direct sunlight. Do not store near heat, sparks or flame.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits: Proprietary Fluorinated Solvent - In all cases, worker exposure to all chemicals, including this product, should be kept as low as possible. No OSHA PEL has been published for this product. 50 ppm workplace exposure limit per manufacturers' recommendation (8 hr TWA)

Engineering Controls: Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when large amounts are released. Vapors are heavier than air. Use with adequate ventilation to prevent vapor buildup in low lying areas.

Process Conditions: Provide eyewash, quick drench.

Respiratory Equipment: Suitable respiratory protection should be provided. Self-contained breathing apparatus is required if a large spill occurs.

Hand Protection: Always use Viton or other impermeable gloves for long term protection. Nitrile gloves are acceptable only for splash protection.

Eye Protection: Wear approved safety/chemical tight goggles. Full face mask recommended. Use proper protective clothing.

Hygiene Measures: When using do not eat, drink or smoke. Wear apron or protective clothing in case of splashes.

Skin Protection: Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Color :	Liquid, Colorless.
Boiling point:	134° F - 56.2° C
Relative Density:	1.47 @ 25° C
Viscosity:	0.65 cPs
Flash Point:	None. ASTM 56
LEL/UEL:	NONE (reported by manufacturer)
Vapor Pressure	31 kPa @ 25° C

10. STABILITY AND REACTIVITY

Stability: Stable under normal temperature conditions and recommended use.

Conditions to Avoid:	Avoid flames and other heat sources. Will decompose when exposed to extreme elevated temperatures.
Materials to Avoid:	Strong oxidizing substances. Incompatible with alkali or alkaline earth metals-powdered Al, Zn, Be, etc.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate Hydrogen fluoride, carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
Oral LD ₅₀ (rat):	>2,000 mg/kg
Inhalation LC ₅₀ (rat):	>24.8mg/L (3,010 ppm)
Dermal LD ₅₀ (rat):	>2,000mg/kg
Skin and eye irritation:	Slight irritation to eye and mucous membranes
Skin irritation (rabbit):	None
Eye irritation (rabbit):	Slight
Sensitization: Skin (rat):	None
Ames Assay:	Negative (OECD 471 & 472)
Chromosomal Aberration Test:	Negative (CHL Cell) (OECD 473)
Repeated Dose Oral Toxicity (28 Day):	NOEL 1,000 mg/kg/d 1,000 ppm
Repeated Dose Inhalation Toxicity (5 day):	NOEL 1,800 ppm Rats exposed to 2,500 or 5,000 ppm for 6 hours per day for 5 days showed convulsions.
Repeated Dose Inhalation Toxicity (90 day):	NOEL 1,000 ppm Rats exposed to 1,000 ppm for 6 hrs/day, 5 days/wk - 90 days. No adverse effects.
Carcinogenicity:	IARC: Not Listed. NTP: Not Listed. OSHA: Not Listed.

12. ECOLOGICAL INFORMATION

Biodegradability:	Not biodegraded (OECD 301C)
Bioaccumulation:	N/D
Activated Sludge Study:	>100 mg/L (OECD 209)
Fish Toxicity:	LC ₅₀ (96 hr) (Carp) >76 mg/L
Algal growth inhibition:	ErC ₅₀ >213 mg/L EbC ₅₀ >213mg/L
Mobility inhibition: (Daphnia magna):	48 hr-EC ₅₀ >94mg/L

13. DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of waste and residues in accordance with federal, state and local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. For destruction, use high-temperature incinerator designed to burn fluorine compounds. Do not allow runoff into sewer, waterway or ground. Do not reuse containers.

14. TRANSPORTATION INFORMATION

Proper Shipping Name:	Specialty Solvent. Industrial Use Only. Not for Consumer use.
USA DOT:	This product is not hazardous for transportation per regulations.
ADR:	Not regulated as dangerous goods.
RID:	Not regulated as dangerous goods.
IATA:	Not regulated as dangerous goods.
IMDG:	Not regulated as dangerous goods.

The above transportation information is valid as of the date of publication of this SDS. Given that regulatory changes are made on an ongoing basis, ETI recommends checking new transportation regulations regularly.

15. REGULATORY INFORMATION:

USA SARA 313/312/302:	N/A
USA Clean Water Act:	Not regulated
USA CERCLA:	Not regulated
USA TSCA:	Listed in Inventory. Regulated under a SNUR, this material can only be used for the following industrial-use applications: (i) cleaning electronic components; (ii) precision cleaning; (iii) de-watering of electronic components and other parts following aqueous cleaning (iv) carrier/lubricant coating for hard disk drives and other precision parts. This product requires an export notice be filed with the USEPA.
USA SNAP:	Acceptable
VOC:	VOC exempt
GWP:	580 (AR4)
ROHS 3:	Complies
International	
CANADA DSL:	Listed
EU ELINCS:	Not Listed
ENCS:	Listed in Inventory
CHINA - IECSC:	Listed in Inventory
KOREA - KECI:	Does not comply
Philippines PICCS:	Does not comply
Mexico INSQ	Listed
Japanese ENCS\SHL	Listed
Taiwan TCSI	Listed

16. OTHER INFORMATION

Only trained personnel should use this material. Since empty containers retain product residue, follow label warnings, even after container is emptied. Each user of this product should study this SDS carefully and consult appropriate expertise as necessary to become aware of and understand the data contained in this SDS and any hazards that may be associated with this product. The information provided in this Safety Data Sheet relates only to the specific material designated herein. The user is responsible for determining the conditions of safe use of this product and for complying with all Federal, State and Local governmental laws and regulations concerning its use. Enviro Tech International, Inc. makes no warranty, express or implied, including the warranty of merchantability and fitness for a particular purpose, and assumes no liability or responsibility for the accuracy, completeness, timeliness or usefulness of this information. Enviro Tech International, Inc. assumes no liability for any damages incurred, whether directly or indirectly, as a result of any errors, omissions or discrepancies in this information. Enviro Tech International, Inc. assumes no liability for reliance on this data and assumes no liability for damages related to the use or misuse of this product.