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## MATERIAL SAFETY DATA SHEET #MSA3F1% (HEC Formula)

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### *PLANIT SAFE™ 1% (HEC) AFFF SUBSTITUTE TEST LIQUID*

Also Used as Super Concentrate to Produce 3% & 6% Test Liquids

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#### Section 1. CHEMICAL PRODUCT/ COMPANY IDENTIFICATION

##### Material Identification

Product: *PLANIT SAFE 1%* Test Liquid  
Synonyms: Test Liquid  
CAS No.: Mixture – No single CAS No. applicable

##### Company Identification

###### **Manufacturer:**

Vector Fire Technology, Inc.  
47 Sarahs Way  
Coatesville, PA 19320

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#### Section 2. COMPOSITION/ INFORMATION OF INGREDIENTS

<u>Components</u>	<u>CAS No.</u>
Water	7732-18-5
Potassium Chloride	7447-40-7
Sodium Benzoate	532-32-1
Hydroxyethylcellulose	9004-62-0

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### **Section 3. HAZARDS IDENTIFICATION**

#### **Potential Health Effects**

##### **Inhalation**

Vapors are minimal at room temperature. If product is heated or sprayed as an aerosol, airborne material may cause respiratory irritation.

##### **Skin Contact**

Contact with liquid may cause irritation or dermatitis due to removal of oils from the skin.

##### **Eye Contact**

Contact with liquid may cause eye irritation.

##### **Ingestion**

Not a hazard in normal industrial use. Small amounts swallowed during normal handling operations are not likely to cause injury; swallowing large amounts may cause injury or irritation.

##### **Additional Health Effects**

Existing eye or skin sensitivity may be aggravated by exposure.

##### **Carcinogenicity Information**

No data available.

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### **Section 4. FIRST AID MEASURES**

##### **Inhalation**

No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of airborne aerosol mists, remove to fresh air. Seek medical attention if effects occur.

##### **Skin Contact**

In case of skin contact, wash off with flowing water or shower. Launder clothing before re-use.

##### **Eye Contact**

In case of eye contact, flush eyes promptly with water for 15 minutes. Retract eyelid often to ensure thorough rinsing. Contact physician if irritation persists.

##### **Ingestion**

Swallowing less than an ounce is not expected to cause significant harm. For larger amounts do not induce vomiting. Give milk or water. Never administer anything by mouth to an unconscious person. Seek medical attention.

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## **Section 5. FIRE FIGHTING MEASURES**

### **Flammable Properties**

Flash Point – Not Applicable

### **Fire and Explosion Hazards**

Avoid contact with water reactive materials, burning metals and electrically energized equipment.

### **Extinguishing Media**

Product is not an extinguishing media. Use media appropriate for surrounding materials.

### **Special Fire Fighting Instructions**

None

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## **Section 6. ACCIDENTAL RELEASE MEASURES**

### **Safeguards (Personnel)**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (Personnel) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

### **Accidental Release Measures**

#### **Super Concentrate or Test Liquid Solution**

Stop flow if possible. Dilute with water to meet existing water quality standards. Flush area with water. Exercise caution, surfaces may be slippery. Disposal should be made in accordance with federal, state and local regulations.

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## **Section 7. HANDLING AND STORAGE**

### **Handling (Personnel)**

Avoid contact with eyes, skin, or clothing. Avoid ingestion or inhalation. Rinse skin and eyes thoroughly in case of contact. Review HAZARDS and FIRST AID sections.

### **Storage**

Recommended storage environment is between 35°F (2°C) and 120°F(49°C). Store product in original shipping container or tanks designed for product storage.

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## **Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Engineering Controls**

Special ventilation is not required.

### **Personal Protective Equipment**

#### **Respiratory**

Recommended exposure limits (OSHA-PEL and ACGIH-TLV) have not been determined for this material. The need for respiratory protection should be evaluated by a qualified health specialist.

#### **Protective Clothing**

Rubber or PVC gloves recommended.

#### **Eye Protection**

Safety glasses, face shield, or chemical splash goggles must be worn when possibility exists for eye contact. Contact lenses should not be worn. Eye wash facilities are recommended.

#### **Other Hygienic Practices**

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before re-use.

### **Exposure Guidelines**

Not Available

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## Section 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

Boiling Point:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Melting Point:	Not applicable
Evaporation Rate:	<1 (Butyl Acetate= 1.0)
Solubility in Water:	100%
pH:	6.8 - 8.0
Specific Gravity:	1.024 @ 20°C
Odor:	Bland
Form:	Liquid
Color:	Clear

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## Section 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable

### Incompatibility, Materials to Avoid

Avoid use of product on burning metals, electrically-energized equipment and contact with water reactive materials.

### Polymerization

Will not occur.

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## Section 11. TOXICOLOGICAL INFORMATION

### Mammalian Toxicity

**This product has not been tested as a whole for acute oral and inhalation toxicity, primary eye irritation, or primary skin irritation.**

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## Section 12. ECOLOGICAL INFORMATION

### Ecotoxicological Information Aquatic Toxicity (rev C 3/6/09)

The acute toxicity of Planit Safe 3% test liquid as a dilute solution has been studied and found to have a 96 hour LC<sub>50</sub> value for *Oncorhynchus mykiss* (rainbow trout) of less than 100mg/L. There was no fish mortality after the 96 hour test duration. An LC<sub>50</sub> of less than 100mg/L is less than the regulatory threshold established for dangerous waste.

### Environmental Fate

	<b>1% Concentrate As Shipped (mg/l)</b>	<b>3% Concentrate Dilution of 1% (mg/l)</b>	<b>As Proportioned Stream with Water (mg/l)</b>
BOD-5 Day	2,154	658	18
COD	24,360	8,120	238 (rev A 4/15/04)

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## Section 13. DISPOSAL CONSIDERATIONS

**PLANIT SAFE** AFFF Test Liquid Concentrate, as sold, is not a RCRA- listed waste or hazardous waste as characterized by 40 CFR 261. However, State, and local requirements for waste disposal may be more restrictive or otherwise different from Federal regulations. Proper clean up and disposal of this material into drains, sewers, or waterways is not expected to cause an environmental impact, however, consult with state or local authorities having jurisdiction regarding the proper regulations, requirements, or concerns encompassed within your site disposal plan.

**PLANIT SAFE** AFFF Test Liquid Concentrate can be treated by waste water treatment facilities. Discharge into biological sewer treatment facilities may be done with prior approval. Specific concerns are high BOD load. Dilution will reduce BOC and COD factors proportionately. Low dosage flow rate to the treatment plant may be helpful. Disposal should be made in accordance with federal, state and local regulations.

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## **Section 14. TRANSPORTATION INFORMATION**

### **Shipping Information**

Proper Shipping Name: Not a DOT Hazardous Substance

Hazard Class: Not Regulated

UN Number: None

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## **Section 15. REGULATORY INFORMATION**

### **U.S. Federal Regulations**

#### **Toxic Substances Control Act (TSCA)**

All components of this product are listed in the TSCA inventory.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA), Title III**

##### **Section 302/304**

There are no components of this material with known CAS numbers which are on the Extremely Hazardous Substances (EHS) list.

##### **Section 311 & 312**

This material does not contain any components subject to Section 311 & 312 reporting requirements.

##### **Section 313**

This material does not contain any components subject to Section 313 reporting requirements.

#### **COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)**

This material does not contain any components which are subject to the reporting requirements of CERCLA.

#### **OTHER REGULATORY INFORMATION**

None

#### **STATE REGULATIONS**

#### **PENNSYLVANIA RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST**

##### **PA Hazardous Substances present at levels greater than 1%:**

None

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## **Section 16. OTHER INFORMATION**

### **NFPA Rating**

Health 0

Flammability 0

Reactivity 0

## **ADDITIONAL INFORMATION**

### **Revision Summary**

1/29/03 New Issue

4/15/04 Rev A

6/10/04 Rev B

3/6/09 Rev C

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