

# **UNIFIRE**

***High Performance Smoke Machines***



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1-800-745-3282***

# Introduction

## Limitations on Warranty and Liability

This product is intended for use with Ultra Fog Smoke Fluid. Manufacturer disclaims any and all liability for misuse of this product.

This warranty is void if the smoke machine is opened, misused, damaged or modified in any way. The warranty on the product gives you specific legal rights, and you may also have other rights which vary from state to state.

For complete warranty information and explanation, refer to Appendix A.

## Getting Help

Unifire provides a help line should you encounter problems during your installation or initial operations. Currently, service hours are 7:30 a.m. to 4:00 p.m. (Pacific Standard Time), Monday through Friday.

Voice line: 509-535-7746

Fax line: 509-535-9064

## Important Information

Record important information in this section.

Unifire Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Purchase Date \_\_\_\_\_

Dealer \_\_\_\_\_

Notes: \_\_\_\_\_

## Introduction

The UF-25 Ultra Fog Smoke Machine is a high performance smoke machine.



The UF-25 can operate as a continuous duty smoke machine, or it can operate intermittently for periods of time set by the user.

For the best results, use only Ultra Fog Smoke Fluid in the UF-25.

**Use of any other smoke fluid or liquid will void the warranty.**

## How to use this guide.

**For your safety, it is important that you read this user guide before you operate the UF-25.** This guide describes how to unpack, plan for, set up and operate the UF-25. It also lists important safety precautions, explains basic trouble shooting techniques, and lists the appropriate service personnel contacts available for technical support.

## UF-25 Specifications

### Power Requirements

100-120 VA.. 50/60 Hz 14 Amp. (15010002)

200-240 VA.. 50/60 Hz 7 Amp. (15010003)

### Electronics

Over-temperature protection

Parallel-inverted SCR's

Thermocouple temperature control

### Weight

### Assembled Unit Dimensions (Including handles & hardware)

14 Kg (31 lb.) with empty tank

27 cm (10.5 inch) Height

30 cm (12.0 inch) Width

69 cm (27.0 inch) Length

# Installing & Operating the UF-25

## Installing the UF-25



Before you plug in the UF-25, be sure to inspect it for damage that might have occurred in shipping. If there is any damage, do not plug in the UF-25 and refer to the Warranty and Conditions portion of this manual.

### Step 1: Stabilize the UF-25

Place the UF-25 on a stable surface.



### Step 2: Fill the fluid bottle

Fill the tank with Ultra Fog Smoke Fluid.

**Caution: Never dilute or mix Ultra Fog Smoke Fluid with any other liquids.**

### Step 3: Position the UF-25

If the UF-25 is to be used with a smoke distribution system, it should now be placed so that the smoke is discharged into the distribution system's inlet or and directed by the distribution systems instructions. If the distribution system has 100 mm (4") tubing, slip 3.5 cm (1.5") of the tubing over the end of the output collar.

Because airflow is essential to any distribution system. **Do not cover the collar vents.**

## Operating the UF-25

### Step 1: Plug in the UF-25

Plug the UF-25 into a power socket with the appropriate voltage.



### Step 2: Enable the system

Press the ON/OFF switch. This illuminates the ON/OFF and HEAT LED's. The UF-25 will require approximately 6 minutes to heat to a minimum operational temperature, at which time the READY LED will illuminate. Until the READY LED is illuminated, the pump is unable to run.

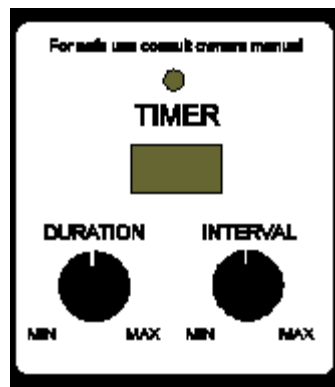
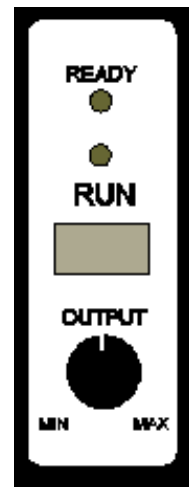


### Step 3: Start the pump

Press the RUN switch. This starts the productions of smoke. Turn the OUTPUT knob clockwise to its minimum setting to prime the pump.

### Step 4: Adjust the volume of smoke produced

For a lower volume of smoke, turn the OUTPUT knob counterclockwise. To produce a higher volume of smoke, turn the OUTPUT knob clockwise.



### Step 5: Enable the timer for intermittent operation

To operate the timer system, press the TIMER switch. The TIMER LED will illuminate, indicating the timer system is enabled. Once enabled, the UF-25 will produce smoke based on the INTERVAL and DURATION knob positions.

### Step 6: Adjust the duration the pump runs

To make the pump run for longer periods of time, turn the DURATION knob clockwise. To make the pump run for shorter periods of time, turn the DURATION knob counterclockwise.

### Step 7: Adjust the interval between smoke releases

To increase the time between smoke releases, turn the INTERVAL knob clockwise. To decrease the time between for release, turn the INTERVAL knob counterclockwise.

### Step 8: Shut down the UF-25

When you are through using the UF-25, simply press the ON/OFF switch again to disable the pump and the heater.



# Maintenance & Warnings

## Maintaining the UF-25

Keep vented cover free of debris.



Keep fluid container free of debris and rinse periodically with Ultra Fog fluid.

Ensure fluid filter is intact and change if necessary by unscrewing the old filter and screwing in the new filter.

For service, refer to qualified personnel only. Unauthorized service will void the warranty.

## Solving Problems

### Problem:

None of the LED's on the remote light up.



### Solutions:

Make sure the unit is plugged in.  
Make sure to push the ON/OFF button.  
Make sure the remote cable is plugged into its socket, and that the plug is locked into the socket with the locking ring.

### Problem:

The unit is on, but no smoke is produced.

### Solutions:

Has the unit had approximately 6 minutes to heat to its operating temperature, signaled by the READY LED illuminating?  
Make sure the tank has fluid in it.  
Press the RUN switch.  
Turn the OUTPUT knob clockwise if it is at the minimum setting.

## Any Other Problems

If the remedies above fail to solve the problem, or if any other problem exists, contact a qualified service technician at your dealer.



## Warnings & Precautions

When handling and working with the UF-25, please observe the warnings and precautions listed below:

### Cautions

Please note and heed all of the WARNING labels on the UF-25 unit, Ultra Fog tank, and distribution system.

This product is intended for use with Ultra Fog Smoke Fluid only. Manufacturer disclaims any and all liability for the misuse of this product and/or Ultra Fog Fluid.

Do not install this product directly above and audience.



Use the UF-25 in adequately ventilated areas.

Use responsible concentrations of smoke.

Nozzle and front of unit may be very hot.

The UF-25 is not designed for residential use.

### Warnings

Do not expose to rain or moisture.

There are no user serviceable parts inside the UF-25.

Do not attempt to open the UF-25 case.

Please refer servicing to qualified personnel.

### Fire & Explosion

Do not operate the UF-25 near flammable materials or gases.

Under no circumstances should tap, distilled, or bottled water, vinegar, alcohol, or any other fluid be used to clean the heat exchanger. Use of such fluids can cause blockage of the heat exchanger, pose health and/or fire hazards, and will void the warranty.

Combining additives to the Ultra Fog Smoke Fluid may cause a health and /or fire hazard.

Specifications subject to change without notice.

# Important Information

## Appendix A

### Warranty and Conditions

#### Unpacking and saving the Shipping Materials

Do not discard the UF-25 shipping carton and packing materials. The shipping carton and packing materials are specifically designed to protect the product during transport.

#### Inspecting the Contents

Carefully remove the contents of each shipping carton and inspect for signs of freight damage. If any such damage is found, you need to notify both the shipping agent and the sales agent immediately.

Any damage incurred in shipping is the responsibility of the carrier. In the case of hidden damage, a claim should be made as soon as discovered and all packing material retained for inspection.

**Note:** Freight Damage Claims are invalid for fixtures of controllers shipped in non-factory shipping cartons and packing materials.

### Limited Warranty

Your UF-25 unit is covered by a two year parts and labor limited warranty. It is the owner's responsibility to furnish receipts or invoices for verification of purchase date, and dealer or distributor. If purchase date cannot be provided, date of manufacture will be used to determine warranty period.



### Returning an Item for Repair covered by Warranty

It is necessary to obtain Return Authorization Number (RA#) from your dealer/point of purchase **BEFORE** any units are sent in for repair. The manufacturer will make the final determination as to whether or not the unit is covered by warranty. This warranty does not cover lamps, fuses, or glass parts.

**Please note:** Freight Damage Claims are invalid for fixtures shipped in non-factory boxes and packing materials.

All shipping will be paid by the purchaser. Under no circumstances will freight collect shipments be accepted.

REPAIR OR REPLACEMENT AS PROVIDED FOR UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. UNIFIRE POWER BLOWERS, INC. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, WITH RESPECT TO ANY PRODUCT, AND UNIFIRE SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNIFIRE SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGE, INCLUDING LOST PROFITS, SUSTAINED OR INCURRED IN CONNECTION WITH ANY PRODUCT OR CAUSED BY PRODUCT DEFECTS OR THE PARTIAL OR TOTAL FAILURE OF ANY PRODUCT REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, (INCLUDING NEGLIGENCE), STRICT LIABILITY, OR OTHERWISE, AND WHETHER OR NOT SUCH DAMAGE WAS FORESEEN OR UNFORESEEN.

Warranty is void if the product is opened, misused, damaged, or modified in any way. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



# Fog Fluid MSDS

## Material Safety Data Sheet

Unifire Power Blowers urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (1) notify it's employees, agents, contractors and others whom it knows or believes will use this material of the information in this MSDS and any other information regarding hazards or safety; (2) furnish this same information to each of it's customers for the products; and (3) request it's customers to notify their employees, customers, and other users of the product of this information.

## Identification

PRODUCT NAME: "Atmospheres" HQLight Enhancement Fluid( " Stage" and "Coldflow" formulas contain different percentages of the CAS#s and a higher percentage of water)

FORMULA: Food grade or high purity grade propylene glycol, triethylene glycol, and de-ionized water  
CAS# 57-55-6 and 112-27-6

BOILING POINT(760 mm Hg): 212-470°F

MELTING POINT: Not Applicable

SPECIFIC GRAVITY (H2O=1): 20°C

VAPOR PRESSURE AT 20°C: <.025mm Hg

VAPOR DENSITY (air=1): 3.9

SOLUBILITY IN WATER: Complete @ 70°F

EVAPORATION RATE(Butyl Acetate=1): .003

APPEARANCE AND ODOR:  
Water-white liquid; mild odor

## Ingredients

This product is a mixture of very low toxicity ingredients, which are of high purity or food grade. According to OSHA this product is non-hazardous under (1910.1200). The largest single component of this product is deionized water.

## Fire and Explosion Hazard Data

FLASH POINT: No flash point by Cleveland Open Cup and Penskey-Martin Closed Cup due to the fact that this is primarily a water based formula

AUTOIGNITION TEMP: Not Determined

FLAMMABLE LIMITS IN AIR % BY VOLUME: Not Determined

EXTINGUISHING MEDIA: Water Spray or all purpose foams by manufacturers' recommended techniques for large fires. Use CO2 or dry chemical media for small fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

## Health Hazard Data

TLV AND SOURCE: Occupational exposure limits (PELs or TLVs) have not been established for any of the components of this product in the United States. In England, exposure limits for propylene glycol are: Vapor- 470 mg/m3 8 hour time weighted average, Particulate- 10 mg/m3 8 hour time weighted average.

SWALLOWING: No evidence of adverse effect for low dose (I.e. 2-4 ounces).May cause nausea and vomiting in higher dosage.

INHALATION: No evidence of adverse effects from exposures up to five times recommended levels. Should continuous exposure to very high concentrations of fog be required professionally (i.e. fire training), a canister type particle mask designed for 10 to 20 micron filtration should be used.

SKIN CONTACT: May cause minimal irritation of areas exposed to liquid.

EYE CONTACT: If splashed in eyes, may cause minimal irritation seen as slight excess redness of the conjunctiva.

EFFECTS OF REPEATED OVEREXPOSURE: Overexposure is unlikely to aggravate respiratory problems and existing allergies to propylene glycol or triethylene glycol.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: A knowledge of the available toxicology information and of the physical and chemical properties of the material suggests that overexposure is unlikely to aggravate existing medical conditions.

EYES: Flush with water.

NOTES TO PHYSICIAN: Treatment of overexposure should be directed at the control of symptoms and the clinical condition.



# Fog Fluid MSDS

## Reactivity Data

This material is known to be stable and does not react violently with any of the following: Air, Water, Heat, Strong Oxidizers.

**HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:** Burning under certain conditions can produce aldehydes, ketones, carbon dioxide and/or carbon monoxide.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization will not occur.

CONDITIONS TO AVOID: None

## Spill or Leak Procedures

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Small spills should be flushed with large quantities of water. Larger spills should be collected for disposal.

**WASTE DISPOSAL METHOD:** Dispense as permitted under appropriate Federal and State regulations.

## Special Protection Information

**RESPIRATORY PROTECTION** (specify type): None required under normal conditions of use.

\* For repeated professional usage, see V (inhalation)

**VENTILATION:** General (mechanical) room ventilation

**PROTECTIVE GLOVES:** Rubber or polyvinyl chloride coated

**EYE PROTECTION:** Protect eyes from liquid with safety glasses.

## Special Precautions

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Normal precautions common to good manufacturing practice should be followed in handling and storage. Avoid repeated contact with skin and clothing. This product is intended for professional use only and should be kept out of the reach of children.

## Regulatory Information

The criteria for listing components in the composition section is as follows:

Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater; non-hazardous components are listed at 3.0% or greater.

Product and/or Component(s) Carcinogenic According to:  
OSHA IARC NTP OTHER NONE

\_\_\_\_\_ X \_\_\_\_\_

**PRODUCT IS NON-HAZARDOUS ACCORDING TO OSHA (1910.1200)**

### Federal Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances

<u>Seq.</u>	<u>Chemical Name</u>	<u>CAS Number</u>	<u>Range in %</u>
			None

### Section 311 Hazardous Categorization:

Acute	Chronic	Fire	Pressure	Reactivate	N/A
					X

### Section 313 Toxic Chemical

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration</u>
		None

**CERCLA 102 (a) / DOT Hazardous Substances:** (+ indicates DOT Hazardous Substance)

<u>Seq.</u>	<u>Chemical Name</u>	<u>CAS Number</u>	<u>Range in %</u>
			None

**CERCLA / DOT Hazardous Substances (Sequence Numbers and RQ's):**

<u>Seq.</u>	<u>RQ</u>
	None

### TSCA Inventory Status:

This product is listed on the Toxic Substance Control Act (TSCA) Chemical Substance inventory.

### State Regulations:

California Proposition 65:

The following detectable components of this product are substances, or belong to classes or substances, known to the State of California to cause cancer and/or reproductive toxicity.

<u>Chemical Name</u>	<u>CAS Number</u>
	None

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# Fog Fluid MSDS

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## Regulatory Information

States Right-to-know Regulations:

Chemical

CAS # 57-55-6, 112-27-6

States Right-to-know

PA, RI

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State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

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International Regulations:

WHMIS Classification: Not Regulated

Canada Inventory Status: All components are listed on the Canadian domestic substance list (DSL).

EINECS Inventory Status: All components are listed on the European Inventory of Existing Chemical Substances (EINECS).

Australia inventory Status: All components are listed on the Australian Inventory of Chemical Substances (ACIS).

Japan Inventory Status: All components are listed on the Japanese MITI inventory.

### NOTE:

The opinions expressed herein are those of qualified experts within the field of Toxicology, Chemistry, and Information Specialists. These include results of independent scientific studies and Toxicology reports. We believe that the information contained herein is current as of the date of the Material Safety Sheet. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of Unifire Power Blowers, it is the user's obligation to determine the conditions of safe use of the product.