

MATERIAL SAFETY DATA SHEET

Revised 2/12/13

DustAir™ HSI FIRE & SAFETY GROUP LLC

01. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER: HO-DUS97
PRODUCT NAME: DustAir™
PRODUCT DESCRIPTION: Aerosol
PRODUCT CODE: FG # 16502

COMPANY NAME:
HSI Fire & Safety Group LLC
107 Garlisch Drive
Elk Grove Village, IL 60007-1322
(847) 427-8340
Fax (847)-427-8343

MANUFACTURED FOR HSI FIRE & SAFETY GROUP LLC, AT:
Shield Packaging Co., Inc
50 Oxford Ave. Dudley, MA 01571-3262
(508) 949-0900
Fax (508)-943-1473

24 HR. EMERGENCY TELEPHONE NUMBER: CHEMTREC 800-424-9300
24 HR. EMERGENCY INTERNATIONAL TELEPHONE NUMBER: CHEMTREC 703-527-3887

02. COMPOSITION

CHEMICAL NAME	%	OCCUPATIONAL EXPOSURE LIMITS	
		TLV	TWA
1,1-difluoro ethane (CAS # 75-37-6)	100		1000 ppm, 8 Hr.

03. HAZARD IDENTIFICATION

Do not use near sparks, open flame or any other sources of heat.

POTENTIAL HEALTH EFFECTS

EYES:

May cause stinging, tearing, redness, swelling and blurred vision. Possible burns similar to frost bite could occur with sustained spraying on eyes.

SKIN:

May cause irritation and stinging. Possible burns similar to frost bite could occur with sustained spraying on skin.

INGESTION:

Not a likely route of exposure. If swallowed do not induce vomiting. Seek immediate medical attention. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe lung injury.

INHALATION:

May cause nonspecific discomfort such as nausea, headache or weakness, or temporary nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness. Excessive inhalation or intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

CHRONIC:

None known

04. FIRST AID MEASURES

EYES:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call a poison control center or doctor for treatment advice.

SKIN:

Remove contaminated clothing. Immediately flush skin with plenty of water for at least 15 minutes. Treat for frostbite if necessary, by gently warming affected area. If irritation persists, call a Poison control center or doctor for treatment advice. In case of contact,

INGESTION:

If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

INHALATION:

Remove affected person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for treatment advice. Keep person calm.

Note to Physician: Because of possible disturbances of cardiac rhythm, catecholamine drugs, such as epinephrine, should be used with special caution only in situations of emergency life support.

05. FIRE FIGHTING MEASURES

Flammability rating (Aerosol):

1,2,0 (Health = 1, Flammability = 2, Reactivity = 0). Flammable.

Flashpoint:

<-50 C (<-58 F)

Flammable limits in Air, % by Volume:

LEL : 3.9

UEL : 16.9

Autoignition temperature:

454 C (849 F)

EXTINGUISHING MEDIA:

Water Spray, Water Fog, Dry Chemical, Carbon dioxide, Non-alcohol foam.

HAZARDOUS COMBUSTION PRODUCTS:

Containers may rupture under fire conditions. Use water spray to cool containers. Under fire conditions this product may decompose to give off toxic gasses such as hydrofluoric acid and possibly carbonyl fluoride. Avoid contact with these materials, which are toxic and irritating. Evacuate personnel immediately.

SENSITIVE TO STATIC DISCHARGE:

N/D

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Aerosol cans may burst at temperatures above 120° F. Fire or intense heat may cause violent rupture of packages.

FIREFIGHTING PROCEDURES:

Evacuate personnel in the general area. Use water to cool material stored in vicinity of fire and remove aerosol cans from danger soon as possible. Self-contained breathing apparatus (SCBA) is required if containers rupture and contents are released under fire conditions. Aerosol cans may burst at temperatures above 120° F. If aerosol cans are bursting, stay clear until bursting is completed. Aerosols cans could act like projectiles when bursting. Isolate from oxidizers, open flames, sparks, heat, electric equipment and other sources of ignition.

06. ACCIDENTAL RELEASE MEASURES

Review FIRE FIGHTING MEASURES and HANDLING sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

ACCIDENTAL RELEASE MEASURES:

Evacuate area. Ventilate area, especially low places where heavy vapors might collect. Wear self-contained breathing apparatus (SCBA). If this product is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA Reportable Quantity is 100 lbs. (Release of an unlisted Hazardous Waste characteristic of ignitability).

ENVIRONMENTAL PRECAUTIONS:

Ventilate area. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

07. HANDLING AND STORAGE

GENERAL PROCEDURES:

HANDLING:

Avoid inhalation of vapor or mist. Use only with adequate ventilation. Do not get in eyes, on skin or on clothing. Product should be kept at temperatures below 120° F in a dry, cool area. Protect from sunlight. Do not pierce or burn containers, even after use.

STORAGE:

Store in a cool, dry area at temperatures below 120° F. Do **NOT** store near heat, open flame, ignition source or near strong acids, bases or oxidizers. Fire or intense heat may cause violent rupture of packages.

Level 1 Aerosol

KEEP OUT OF THE REACH OF CHILDREN

08. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<u>CHEMICAL NAME (CAS #)</u>	<u>OSHA</u> <u>(PEL)</u>	<u>ACGIH</u> <u>(TLV)</u>	<u>WEEL (AIHA)</u> <u>(TWA)</u>
1,1-difluoro ethane (CAS # 75-37-6)			1000 ppm, 8 Hr.

ENGINEERING CONTROLS:

Mechanical ventilation should be used when handling this product in enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT:

Take precautions to avoid contact with eyes, face and skin.

RESPIRATORY:

Use in well ventilated areas. Take precautions to avoid breathing vapors or spray mist of this product.

**DO NOT SMOKE, EAT, OR DRINK WHILE SPRAYING THIS PRODUCT.
OBSERVE NORMAL HYGIENIC PRACTICES.**

09. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Gas in pressurized aerosol can
BOILING RANGE (Aerosol):	Not determined for aerosol.
FREEZING POINT:	Not determined for aerosol.
SPECIFIC GRAVITY (H ₂ O = 1):	N/A
pH:	N/A
VAPOR PRESSURE (mm H):	87 psi @ 70° F
VOLATILE BY VOLUME - %:	100
VAPOR DENSITY (AIR=1):	> 1
EVAPORATION RATE (water = 1):	> 1
APPEARANCE AND ODOR:	Clear, colorless gas, with slight ethereal odor.
SOLUBILITY IN WATER:	Insoluble
VISCOSITY:	Not determined for aerosol.
VOC:	100%

10. STABILITY AND REACTIVITY

STABLE:

Yes. However, avoid open flames and high temperatures.

HAZARDOUS POLYMERIZATION:

Will NOT occur.

CONDITIONS TO AVOID:

Incompatible with alkali or alkaline earth metals, such as powdered Al, Zn, Be.

HAZARDOUS DECOMPOSITION PRODUCTS:

Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrogen fluoride gas, possibly hydrofluoric acid and possibly carbonyl fluoride.

MATERIALS TO AVOID:

Strong oxidizing agents or reducing agents, strong acids and bases.

11. TOXICOLOGICAL INFORMATION

INHALATION:

ALC, 4 hr: 383,000 ppm in rats

Inhalation of high levels of this product may cause labored breathing, lung irritation, lethargy, incoordination and loss of consciousness.

INGESTION:

Oral ALD: >1500 mg/kg in rats

Ingestion of single high doses of this product caused weight loss and lethargy in animal studies.

EYE EFFECTS:

Mildly irritating.

SKIN EFFECTS:

Mildly irritating.

SENSITIZATION:

N/D

COMMENTS:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as being carcinogens.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA:

Not determined.

ECOTOXICOLOGICAL INFORMATION:

Not determined.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

Remove to a permitted waste facility. Comply with Federal, State, and local regulations.

EMPTY CONTAINER:

Do **NOT** puncture or incinerate empty aerosol cans. Dispose of in accordance with procedures approved by State and Local authorities.

RCRA/EPA WASTE INFORMATION:

This material may be a RCRA Hazardous waste upon disposal due to the ignitability characteristic.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)**BY LAND:**

CARTON MARKED WITH PROPER SHIPPING NAME: Consumer Commodity. Hazard Class: ORM-D

BY WATER VESSEL (IMO/IMDG):

PROPER SHIPPING NAME: UN1950, Aerosols, 2.1, Ltd. Qty. Label: None. Hazard Class: ORM-D
(Level 1 Aerosol)

AIR (ICAO/IATA):

PROPER SHIPPING NAME: ID8000, Consumer Commodity, 9. Label: Miscellaneous Dangerous Goods.
(Packaging instruction 910)

PRIMARY HAZARD CLASS/DIVISION: N/D

OTHER SHIPPING INFORMATION: N/D

15. REGULATORY INFORMATION

U.S. FEDERAL, STATE and LOCAL REGULATORY INFORMATION:

This product and/or its constituents listed herein are on the EPA TSCA inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state or local regulations. Consult those regulations applicable to your operation.

CLEAN WATER ACT:

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

SARA SECTION 311/312 HAZARD CATEGORIES:

**ACUTE
HEALTH**
YES

**CHRONIC
HEALTH**
NO

FIRE
YES

**SUDDEN RELEASE
OF PRESSURE**
YES

REACTIVITY
NO

SARA SECTION 313 REPORTABLE INGREDIENTS:

This product contains no toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) Of 1986 and 49 CFR 372.

COMPONENT
None

CAS #
None

MAX %
0

See Section 03. HAZARD IDENTIFICATION, for potential health risks.

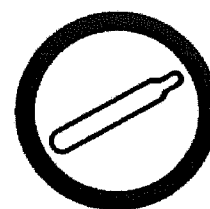
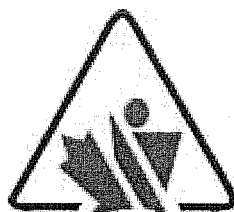
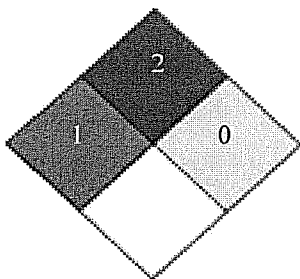
SARA SECTION 302/304 EMERGENCY PLANNING**EMERGENCY PLAN:**

There are no SARA Title III Section 302 extremely hazardous substances present in this product (40 CFR 355)

VOLATILE ORGANIC COMPOUNDS (VOC): None.

16. OTHER INFORMATION**Flammability rating (Aerosol):**

1,2,0 (Health = 1, Flammability = 2, Reactivity = 0). Flammable.



Global Warming Potential (GWP) = 135

The information contained in this Material Safety Data Sheet is furnished without warranty of any kind, expressed or implied. Information in this Data Sheet has been assembled by the manufacturer based on its own studies and on the work of others and is believed to be correct as of the date issued. However, no warranty of any kind is expressed or implied as to the accuracy, completeness, or adequacy of the information obtained herein. The Manufacturer shall not be liable, regardless of fault, to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of, or in connection with, the accuracy, completeness, or adequacy of the information obtained herein. It is intended to assist in the normal safe usage of the product.