## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 11/11/2016 Revision date: 11/11/2016 Version: 1.0

## **SECTION 1: Identification**

1.1. Product identifier

Product form : Substance
Substance name : Dust Air™
Product code : Not available

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Removing dust from sensitive areas/equipment

1.3. Supplier

Supplier

HSI Fire and Safety Group, LLC 107 Garlisch Drive Elk Grove Village, IL - U.S.A.

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HSI Fire and Safety Group, LLC

unit # 1252

3-1750 The Queensway Etobicoke, ON M9C5H5

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

## **SECTION 2: Hazard identification**

### 2.1. Classification of the substance or mixture

#### Classification (GHS-CA)

Flam. Aerosol 1 H222 Liquefied gas H280 Simple Asphy H380

## 2.2. GHS Label elements, including precautionary statements

### **GHS-CA labelling**

Hazard pictograms (GHS-CA)





GHS04

GHS02

Signal word (GHS-CA) : Danger

Hazard statements (GHS-CA) : H222 - Extremely flammable aerosol

H280 - Contains gas under pressure; may explode if heated H380 - May displace oxygen and cause rapid suffocation

Precautionary statements (GHS-CA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking

P211 - Do not spray on an open flame or other ignition source

P251 - Do not pierce or burn, even after use

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

P403 - Store in a well-ventilated place

## 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS-CA)

Not applicable

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Name	Product identifier	%
1,1-Difluoroethane	(CAS No) 75-37-6	100

## 3.2. Mixtures

Not applicable

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SECTION	4: First-aic	ı illeasules

First-aid measures after inhalation

: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact

: If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists. Thaw frosted parts with lukewarm water. Do not rub affected area.

First-aid measures after eye contact

In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention. Thaw frosted parts with lukewarm water. Do not rub affected area.

First-aid measures after indestion

: Not a normal route of exposure. If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation

: May cause respiratory tract irritation. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.

Symptoms/injuries after skin contact

: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause frostbite on contact with the liquefied gas.

Symptoms/injuries after eye contact

May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. May cause frostbite on contact with the liquefied gas.

Symptoms/injuries after ingestion

: Not a normal route of exposure. May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

#### 4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment

: Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Foam. Dry chemical.

## 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use carbon dioxide.

# 5.3. Specific hazards arising from the hazardous product

Fire hazard

: Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon. Hydrogen fluoride. Carbonyl fluoride.

Explosion hazard

: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

### 5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Use water spray to keep fire-exposed containers cool.

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

## 6.2. Methods and materials for containment and cleaning up

For containment

: Stop leak if safe to do so. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks).

Methods for cleaning up : Provide ventilation

## 6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

#### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Container may explode if heated. . Use only non-sparking tools. When using do not eat, drink or smoke. Use only in well-ventilated areas.

Hygiene measures

: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

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### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep out of the reach of children. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Store away from direct sunlight or other heat sources. Store in a dry, cool and well-ventilated

area.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

## Individual protection measures/Personal protective equipment

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear chemically resistant protective gloves.

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : A NIOSH approved respirator is recommended in poorly ventilated areas or when permissible

exposure limits may be exceeded. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected

respirator.

Environmental exposure controls : Maintain levels below Community environmental protection thresholds.

Other information : Do not eat, smoke or drink where material is handled, processed or stored. Wash hands

carefully before eating or smoking. Handle according to established industrial hygiene and

safety practices.

### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Aerosol : Colourless Colour Odour Odourless Odour threshold No data available Hq No data available pH solution : No data available Relative evaporation rate (butylacetate=1) : No data available

Relative evaporation rate (ether=1) : > 1

Vapour pressure : 4.31 bar @ 21 °C (70 °F), 64 psig; 11.7 bar @ 54 °C (129 °F), 178 psig

Vapour pressure at 50 °C : No data available Relative vapour density at 20 °C : 2.28 @ 21 °C (70 °F)

Relative density :  $0.91 \text{ g/ml} @ 21 ^{\circ}\text{C} (70 ^{\circ}\text{F}); 0.809 \text{ g/ml} @ 54 ^{\circ}\text{C} (130 ^{\circ}\text{F})$ 

Relative density of saturated gas/air mixture : No data available

Density : No data available

Relative gas density : No data available

Solubility : Water: 0.008 % @ 21 °C (70 °F)

Partition coefficient n-octanol/water : 1.43

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : < 0.6 cP @ 21 °C (70 °F)

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : 3.9 - 16.9 vol % @ 25 °C (77 °F)

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9.2. Other information

VOC content : 100 %

## SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal storage conditions. Extremely flammable aerosol. Contents under

pressure. Container may explode if heated. Do not puncture. Do not burn.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

Conditions to avoid : Incompatible materials. Sources of ignition. Direct sunlight. Moisture.

Incompatible materials : Acids. Strong oxidizing agents. Alkali metals.

Hazardous decomposition products : May include, and are not limited to: oxides of carbon. Hydrogen fluoride. Carbonyl fluoride.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.

Acute toxicity (dermal) : Not classified.

Acute toxicity (inhalation) : Not classified.

Dust Air™	
LD50 oral rat	No data available
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available

Skin corrosion/irritation : Not classified. Serious eye damage/irritation : Not classified. Respiratory or skin sensitization Not classified. Not classified. Germ cell mutagenicity Carcinogenicity : Not classified. : Not classified. Reproductive toxicity STOT-single exposure Not classified STOT-repeated exposure : Not classified. : Not classified. Aspiration hazard

Dust Air™	
Vaporizer	Aerosol

Symptoms/injuries after inhalation : May cause respiratory tract irritation. Intentional misuse by deliberately concentrating and

inhaling the contents may be harmful or fatal. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.

Symptoms/injuries after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the

skin. May cause frostbite on contact with the liquefied gas.

Symptoms/injuries after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling. May cause frostbite on contact with the

liquefied gas.

Symptoms/injuries after ingestion : Not a normal route of exposure. May be harmful if swallowed. May cause stomach distress,

nausea or vomiting.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

#### 12.2. Persistence and degradability

Dust Air™	
Persistence and degradability	Not established.

## 12.3. Bioaccumulative potential

Dust Air™		
Partition coefficient n-octanol/water	1.43	
Bioaccumulative potential	Not established.	



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#### 12.4. Mobility in soil

Dust Air™	
Partition coefficient n-octanol/water	1.43

#### 12.5. Other adverse effects

No additional information available

### **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal

regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Flammable vapours may accumulate in the container.

## **SECTION 14: Transport information**

#### 14.1. Basic shipping description

In accordance with TDG

**TDG** 

UN-No. (TDG) : UN1030 TDG Primary Hazard Classes : 2.1

Transport document description : UN1030 1,1-DIFLUOROETHANE, 2.1
Proper Shipping Name (TDG) : 1,1-Difluoroethane, limited quantities

Hazard labels (TDG) :



## 14.2. Transport information/DOT

No additional information available

### 14.3. Air and sea transport

**IMDG** 

UN-No. (IMDG) : 1030

Proper Shipping Name (IMDG) : 1,1-DIFLUOROETHANE (REFRIGERANT GAS R 152a)

Class (IMDG) : 2 - Gases

**IATA** 

UN-No. (IATA) : 1030

Proper Shipping Name (IATA) : 1,1-Difluoroethane

Class (IATA) : 2

## **SECTION 15: Regulatory information**

## 15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

### 15.2. International regulations

No additional information available

## **SECTION 16: Other information**

Date of issue : 11/11/2016
Revision date : 11/11/2016

Indication of changes:

Other information : None.

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