

**MATERIAL SAFETY DATA SHEET**  
**Essentially Similar to U.S. Department of Labor Form OSHA**  
**Revised 07/11/2013**  
**HMIS Health-1 Flammability-4 Physical Hazard -1 Personal Protection x**

**SECTION I-Product Information**

**Manufacturer:** A.V.W. Inc.  
**24 Hour Emergency Phone Number:** 800-424-9300  
**Product Name:** Blow Off Air Duster 152a  
**Synonym(s):** Blow Off Air Duster  
**Blow Off Auto Duster** 3.5oz  
8oz  
**Blow Off 152a Duster** 3.5oz  
8oz  
10oz  
**Trade Name:** 152a  
**Chemical Name:** Ethane, 1,1-Difluoro  
**FSPID:** Front 152a  
**Model No:** Blow Off 3.5 oz, Blow Off 8 oz, Blow Off 10oz.  
**Product Use:** Cleaning

**SECTION II-Hazardous Identification**

**Emergency Overview** DANGER  
Flammable gas. Contents under pressure. Containers may explode when heated.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation.

**Eyes** Contact with liquid may cause frostbite.

**Skin** Contact with liquid may cause frostbite.

**Inhalation** Excessive intentional inhalation may cause respiratory tract irritation and central Nervous system effects (headache, dizziness). Vapors may cause dizziness or suffocation.

**Ingestion** Not a normal route of exposure.

**Target organs** Eyes. Skin. Respiratory system.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms may include redness, dryness of the skin.

**Odor, Color, Grade** Clear, colorless with slight ethereal odor.

**General Physical Form** Gas

**Immediate health, physical, and environmental hazards:**  
Closed containers exposed to heat from fire may build pressure and explode. May cause frostbite. May cause target organ effects.

**SECTION III-Composition on Ingredients**

**Component** CAS # 75-37-6 % by Wt 100% 1, 1-DIFLUOROETHANE

**SECTION IV-First Aid Measures**

**Skin:** Flush with cool water. Wash affected area with soap and water. If signs/symptoms persist, get medical attention.

**Eye contact:** Immediately flush with large amounts of cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Inhalation:** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

**Ingestion:** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

### SECTION V-Firefighting Measures

**Flammable Properties** Flammable by WHMIS/OSHA criteria. Containers may explode when heated. Autoignition temperature 849 °F

**Flash Point:** < 50 °F (Details: consumer aerosol does not exhibit a flame projection, therefore it is not determined to be flammable as defined in 16 CFR, Section 1500.3(c) (6) (viii).

**Flammable Limits-LEL** 3.9% volume

**Flammable Limits-UEL** 16.9% volume

**Extinguishing media**

**Suitable extinguishing media** Small Fires: Dry chemical. Carbon dioxide. Water spray. Fog.

**Unsuitable extinguishing media:** Not available

**Protection of firefighters specific hazards arising from the chemical** Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.

**Protective equipment for firefighters** Firefighters should wear full protective clothing including self contained breathing apparatus.

**Hazardous combustion products** May include and are not limited to: Oxides of carbon. Fluoride gases.

**Explosion data**

**Sensitivity to mechanical impact** Not available

**Sensitivity to static discharge** Not available

### SECTION VI-Accidental Release Measures

**Accidental Release Measures** Refer to other sections of this MSDS for information regarding physical and health hazard, respiratory protection, ventilation, and personal protective equipment. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and

electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. Close cylinder. If the cylinder can't be closed, place in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors. Dispose of collected material as soon as possible.

**Personal precautions** keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

**Methods for containment** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up** Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

### **SECTION VII-Handling and Storage**

**Handling:** Do not eat, drink or smoke when using this product.  
Wash exposed areas thoroughly with soap and water.  
Contents may be under pressure, open carefully.  
Keep away from heat, sparks, open flame, pilot lights and other sources of ignition.

No smoking while handling this material. Avoid eye contact with vapors, mists, or spray.

Avoid breathing mists or aerosols of this product.

Use good industrial hygiene practices in handling this material.

**Storage:** Do not eat, drink or smoke when using this product.  
Wash exposed areas thoroughly with soap and water.  
Keep out of reach of children.

Do not store at temperatures above 49°C (120.2°F).

Keep away from heat, open flames or other sources of ignition.

Store away from acids. Keep container in well-ventilated area.

### **SECTION VIII-Exposure Controls/Personal Protection**

**Engineering Controls:** Do not use in a confined area or areas with little or no air movement.  
Use general dilution ventilation and/or control mist, vapor, or spray.  
If ventilation is not adequate, use respiratory protection equipment

#### **Personal protective equipment**

**Respiratory protection:** Do not breathe vapors. Use with adequate ventilation. Keep container closed.

For emergencies select one of the following NIOSH approved respirators based on airborne concentration of

contaminants and in accordance with OSHA regulations:

Half face piece or full face pressure demand self-contained breathing apparatus.

**Hand protection:** If there is constant skin contact, rubber gloves are recommended.

**Eye/Face protection:** Avoid eye contact with vapors, mists, or spray.  
The following eye protection(s) are recommended: Safety Glasses with side shields.

**Skin protection:** Wear insulated gloves to protect against frostbite.

**General hygiene considerations:** Handle in accordance with good industrial hygiene and safety practice.  
When using do not eat or drink.  
Wash hands and face before breaks and immediately after handling product.

### SECTION IX-Physical and Chemical Properties

**Form:** Liquefied gas

**Form:** colorless

**Odor:** slight, ethereal

**Odor threshold:** Not available

**Ph:** Not available

**Physical state:** Gas

**Melting point:** Not available

**Melting point:** Freezing point:

**Boiling point/**

**Boiling range:** -25°C (-13.00 °F)

**Flash point:** -50°C (-58.00 °F)

**Vapor Pressure:** 599.43 kPa @25°C

**Pour Point:** Not Available

**Specific gravity:** 0.91

**Relative density:** 0.9 g/cc @2°C

**Vapour density:** 2.4 @25°C

**Flammability limits in air,**

**Lower, % by volume** 3.9

**Flammability limits in air,**

**upper, % by volume** 16.9

**Octanol.wate coefficient** Not available

**Solubility (H2O)** Slightly

**Auto-ignition temperature** 454 °C (849.20 °F)

**Percent volatile:** 100

### SECTION X-Stability and Reactivity

**Chemical stability:** Stable under recommended storage conditions.

**Conditions to avoid:** Aerosol containers are unstable at temperatures above 49 °C (120.2°F).

**Incompatibility:** Alkaline materials. Alkaline earth metals.

**Hazardous decomposition**

**Products:** May include and are not limited to: Oxides of carbon. Fluoride gases.  
**Possibility of hazardous reactions:** Hazardous polymerization does not occur.

#### **SECTION XI-Toxicological Information**

**Eye irritation** Contact with liquid may cause frostbite.  
**Skin** Contact with liquid may cause frostbite.  
**Inhalation** Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).  
Vapors may cause dizziness or suffocation.  
**Ingestion** Not a normal route of exposure.  
**Sensitization** Non-hazardous by WHMIS/OSHA criteria  
**Chronic effects** Non-hazardous by WHMIS/OSHA criteria  
**Carcinogenicity** Non-hazardous by WHMIS/OSHA criteria  
**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria  
**Reproductive effects** Non-hazardous by WHMIS/OSHA criteria  
**Teratogenicity** Non-hazardous by WHMIS/OSHA criteria  
**Synergistic Materials** Not Available

#### **SECTION X11-Ecological Information**

**Ecotoxicity** Not available  
**Environmental effects** **Product contains no ozone depleting CFCs**  
**Aquatic toxicity** Not available  
**Persistence / degradability** Not available  
**Bioaccumulation / accumulation** Not available  
**Partition coefficient** Not available  
**Mobility in environmental media** Not available  
**Chemical fate information** Not available  
**Other adverse effects** Not available

#### **SECTION X111-Disposal Considerations**

**Waste Code:** Not available  
**Disposal instructions** Review federal, state/provincial, and local government requirements prior to disposal.  
**Waste from residues/unused** Not available  
**Contaminated packaging** Not available

#### **SECTION XIV – Transportation Information**

**U.S Department of Transportation (DOT) International Maritime Organization (IMO)**  
**Basic shipping** 1, 1-Difluoroethane

**requirements:**

**Transportation of Dangerous Goods (TDG – Canada)**

**Hazard class** 2.1  
**UN number** 1030

**Additional Information:**

**DOT/IMO Label:** FLAMMABLE GAS  
**Special Information:** CARGO AIRCRAFT ONLY  
**IATA/CAO (Air)**

**Basic shipping requirements:**

**Proper shipping name:** 1, 1-Difluoroethane  
**Hazard class:** 2.1  
**UN number:** 1030

**Additional information:**

**Maximum net quantity** Cargo aircraft only-150 kg maximum  
**Packaging** (Forbidden on passenger aircraft)

**SECTION XV-Regulatory Information**

**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous** Yes

**CERCLA (Superfund) reportable quantity** None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	Yes
Pressure Hazard	Yes
Reactivity Hazard	No

**Section 302 extremely hazardous substances** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**WHMIS status** Controlled

**WHMIS classification** Class A – Compressed Gas, Class B – Division 1 – Flammable Gas

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**Inventory name**

**Country(s) or region** Inventory

**Canada** Domestic Substances List (DSL)

**Canada** Non-Domestic Substances List (NDSL)

**United States &  
Puerto Rico**

Toxic Substances Control Act (TSCA) Inventory

**SECTION XVI-Other Information**

NFPA Hazard Classification

**Health:** 1  
**Flammability:** 4  
**Reactivity:** 1  
**Physical hazard:** 0

HMIS Hazard Classification

**Health:** 1  
**Flammability:** 4  
**Reactivity:** 1  
**Protection:** X – See PPE section