


# SAFETY DATA SHEET

## Innovera Duster

### SECTION 1 - IDENTIFICATION

<b>Product Name</b>	Innovera Duster
<b>Product Number</b>	IVR10010, IVR10012, IVR10014, IVR10016
<b>Trade Name/Chemical Name</b>	HFC-152a / Difluoroethane, R152a
<b>Recommended Use</b>	Remove dust and small particle
<b>Restrictions On Use</b>	Read back panel on can carefully before use. Keep out of reach of children. Misuse by deliberately concentrating and inhaling contents may be harmful or fatal
<b>Manufacturer</b>	ZheJiang Ludao Technology Co., Ltd.
<b>Product Supplied By</b>	AW Product Sales & Marketing, Inc.
<b>Address</b>	204, E. 2 <sup>nd</sup> Avenue #343, San Mateo, CA 94401
<b>Phone</b>	1-415-867-7734
<b>Emergency Phone</b>	<b>Chemtrec 1-800-424-9300</b>

### SECTION 2 – HAZARD(S) IDENTIFICATION

<b>Classification</b>	Flammable Gases – Category 2 Gases under pressure, Compressed gas
<b>Signal Word</b>	Warning
<b>Pictogram</b>	
<b>Hazard Statements</b>	Contains gas under pressure; may explode if heated. Flammable gas
<b>Precautionary Statements</b>	Eliminate all ignition sources if safe to do so.
<b>Prevention</b>	Do not spray on an open flame or other ignition source. Keep away from heat
<b>Storage</b>	Store in a well-ventilated place. Do not expose to temperatures exceeding 49°C.
<b>General</b>	Keep out of reach of children
<b>Ingredients of</b>	
<b>Unknown toxicity</b>	0%

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% TLV PEL UNITS
1,1-Difluoroethane	75-37-6	99.99
Bitterant	Denatonium Benzoate	0.01

### SECTION 4 – FIRST-AID MEASURES

General	Move victim to fresh air. Give artificial respiration if victim is not breathing. Remove and isolate contaminated clothing and shoes. In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eyes	Flush immediately with water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Flush contaminated skin with plenty of water. Get medical attention if irritation develops.  
 Inhalation Remove exposed person to fresh air if adverse effects are observed.  
 Get immediate medical attention if respiratory, or unconsciousness occurs.  
 Ingestion Do not make person vomit unless directed to do so by medical personnel

**Most important symptoms, acute and delayed potential acute health effects:**

Eye contact Liquid can cause burns similar to frostbite.  
 Inhalation No known significant effects or critical hazards.  
 Skin contact Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.  
 Ingestion Ingestion of liquid can cause burns similar to frostbite.

**Note to physician: Treat symptomatically.**

**SECTION 5 – FIRE-FIGHTING MEASURES**

**Extinguishing media:** Water spray, Water fog, Dry chemical.  
**Flash Point** <-50 C (<-58 F) **Flammable Limits LEL** - 3.9 Auto Ig. 454C **UEL** - 16.9  
**Fire and Explosion Hazards** - Flammable. Cylinders are equipped with temperature and pressure relief devices but still may rupture under fire conditions. Use water spray to cool cylinders and tanks.  
**Special Fire Fighting Procedures** - Keep container cool with water spray. If gas exiting container ignites, stop flow of gas. Do not put out the fire unless leak can be stopped immediately. Self-contained breathing apparatus (SCBA) is required if containers rupture and contents are released under fire conditions.  
**National Fire Protection Association (NFPA 30B)** - Level 1 Aerosols (lowest flammability rating)  
**Consumer Products Safety Commission (CPSC 1500.3 (c)(6).16CFR** - Not flammable

**SECTION 6 – ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures  
 Non-emergency personnel Accidental release pose a serious fire or explosion hazard. No action shall be Taken involving any personal risk or without suitable training. Evacuate Surrounding areas. Keep unnecessary and unprotected personnel from entering. Do you touch or walk through spilled material. Shut off all ignition sources. No Flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate Ventilation. Wear appropriate respirator when ventilation is inadequate. Put on Appropriate personal protective equipment.  
 Emergency responders If specialized clothing is required to deal with the spillage, take note of any Information in Section 8 on suitable and unsuitable materials. See also the Information in “For non-emergency personnel”.

**SECTION 7 – HANDLING AND STORAGE**

**Handling:**  
 Keep out of reach of children. Misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Use in well ventilated area. This product can be ignited under certain circumstances. Therefore, do not use near potential ignition sources, hot surfaces, or spark-producing equipment. Do not tilt, shake, or turn can upside down before or during use as liquid contents may be dispensed. Liquid contents may cause frostbite on contact with skin. Contact physician if such contact occurs.  
**Storage:**  
 Store in cool place. Do not leave in direct sunlight, enclosed vehicles, or expose to temperature above 120°F(49°C), as overheating could cause can to burst.  
**Note: Observe all federal, state and local regulations when storing this substance.**

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

Eye protection Chemical type goggles or face shield optional.  
 Skin protection Impervious gloves should be worn.  
 Respiratory protection Wear breathing mask.  
 Ventilation No special ventilation is usually necessary. However, if operating conditions create high air borne concentrations of this material, special ventilation may be needed.

Other clothing and equipment: No special clothing or equipment is usually necessary.  
 Work practices, hygienic practices No information is available.  
 Protective measures during maintenance of contaminated equipment N/A

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

<b>Physical state</b>	Gas [Liquefied gas]
<b>Color</b>	Colorless
<b>Boiling Point/condensation point</b>	-25°C (-13°F)
<b>Melting Point</b>	No applicable data available
<b>Odour</b>	Mild
<b>Odour Threshold</b>	N/A
<b>pH</b>	N/A
<b>Flash point</b>	[Product does not sustain combustion]
<b>Specific Gravity</b>	0.91
<b>Percent Volatile by Volume</b>	100 WT %
<b>Density</b>	0.90 g/cc at 25°C (77°F) - Liquid
<b>Solubility in Water</b>	0.28 WT% at 25°C (77°F)
<b>Evaporation Rate</b>	N/A
<b>Decomposition Temperature</b>	N/A
<b>Auto-ignition Temperature</b>	N/A
<b>Vapor Pressure (MM Hg)</b>	87 psia at 25°C (77°F)
<b>Vapor Density (Air=1)</b>	2.4 at 25°C (77°F)
<b>Viscosity</b>	Not applicable

## SECTION 10 – STABILITY AND REACTIVITY

**Instability** - Stable, however, avoid open flames and high temperatures.

**Incompatibility** - Incompatible with alkaline or alkaline earth metals.

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

**Polymerization** - Polymerization will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity	N/A
Irritation/Corrosion	N/A
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	N/A
Carcinogenicity	N/A
Reproductive toxicity	N/A
Teratogenicity	N/A

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include irritation, redness
Inhalation	Adverse symptoms may include respiratory tract irritation, coughing
Skin contact	Adverse symptoms may include frostbite, irritation, redness, dryness, cracking
Ingestion	Adverse symptoms may include frostbite, irritating to mouth, throat and stomach.

## SECTION 12 – ECOLOGICAL INFORMATION

Biodegradation	N/A
Environmental fate	N/A

Persistence and degradability N/A

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**SECTION 13 – DISPOSAL CONSIDERATIONS**

**Waste Disposal Method** - Reclaim by distillation, incinerate, or remove to a permitted waste facility. Comply with Federal, State and Local regulations.

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

**PPE-PERSONAL PROTECTIVE EQUIPMENT REQUIRED: NONE**

**SECTION 14 – TRANSPORT INFORMATION**

Shipping Information

UN Number	1030
UN Proper Shipping Name	1,1-Difluoroethane
US DOT	1,1-Difluoroethane, R152a, 2.1
DOT Classification	2.1
Packing Group	Not Regulated
Packaging Exceptions	LTD QTY (ORM-D). AW Product Sales & Marketing, Inc. has been granted a DOT Special Permit, SP-11516. A copy can be obtained by contacting AW Product Sales & Marketing, Inc.
Shipping Paper Information	None required

**SECTION 15 – REGULATORY INFORMATION**

U.S. Federal Regulations	This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. TSCA 8(1) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): This material is listed or exempted.
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	This material does not contain any chemical components with know CAS number that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards California Prop. 65	Fire Hazard, Sudden Release of Pressure Hazard This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Canadian Federal Regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS Classification	Class A: Compressed gas. Class B-1: Flammable gas
WHMIS status	Controlled
Canada Domestic Substances List (DSL)	This product is listed on the DSL inventory list and complies with the inventory Requirements administered by the governing country.

**SECTION 16 – OTHER INFORMATION**

Revised: 3/20/2020

**DISCLAIMER**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.