

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: di Clean Dr. Multi-Purpose Duster

Company Name: Digital Innovations
PO Box 23
Bellingham, WA 98227

Phone Number: +1 (360)734-9090

Web site address: digitalinnovations.com

Emergency Contact: CHEMTREC +1 (800)424-9300

Intended Use: Aerosol duster; canned air

Synonyms: 40001 - di CleanDr. Multi-Purpose Duster (single pack)
40002 - di CleanDr. Multi-Purpose Duster (twin pack)

2. HAZARDS IDENTIFICATION

Gas Under Pressure, Liquefied gas



GHS Signal Word: **Warning**

GHS Hazard Phrases: H280 - Containers gas under pressure; may explode if heated.

GHS Precautionary Phrases: P251 - Pressurized container: Do not pierce or burn, even after use.

GHS Response Phrases: No phrases apply.

GHS Storage and Disposal Phrases: P410+403 - Protect from sunlight and store in well-ventilated place. P410+412 - Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F.

Additional Hazards Information

The pressurized liquified gas is extremely flammable. Using this product in an upside-down position, or shaking while using, can cause liquid product to be expelled. The information pertaining to flash point below applies to the liquified gas. Asphyxiant in high concentrations. Intentional misuse and inhalation abuse may cause cardiac or central nervous systems effects. Contact with liquid may cause cold burns/frostbite.

Non-flammable aerosol. Not defined as flammable aerosol because heat of combustion is <20 kJ/g and ignition distance <15 cm according to 16 CFR 1500.3(c)(6) for the U.S. Federal Hazard Substance Act of the Consumer Product Safety Commission regulations. Not defined as a flammable aerosol under the Canadian Controlled Product Regulation SOR/88-66, 40 Division 5 criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	
75-37-6	1,1-Difluoroethane	>99.0 %	

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.
In Case of Inhalation:	Remove victim to fresh air. Get medical aid if irritation develops and persists.
In Case of Skin Contact:	Rinse skin with water [or shower]. In case of frostbite: Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.
In Case of Eye Contact:	Rinse with copious amounts of water. Do not attempt to neutralize with chemical agents. Consult an ophthalmologist if irritation persists.
In Case of Ingestion:	Not a likely route of exposure.
Signs and Symptoms Of Exposure:	Containers refrigerated gas; may cause cryogenic burns or injury. Not expected to present a significant hazard under anticipated conditions of normal use. The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Indication of any immediate medical attention and special treatment needed:	IF exposed or concerned: Get medical attention/advice. If medical advice is needed, have product container or label at hand.
Note to Physician:	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flash Pt:	-50.00 C (-58.0 F)
Explosive Limits:	LEL: 3.5% UEL: 16.9%
Autoignition Pt:	455.00 C (851.0 F)
Suitable Extinguishing Media:	Use water spray, dry chemical, carbon dioxide, or appropriate foam.
Fire Fighting Instructions:	Fight fire remotely due to the risk of explosion. Remove containers from fire area if you can do so without risk. Do not extinguish unless leak can be stopped safely. Use water spray to keep fire-exposed containers cool. After the fire has been extinguished, explosive, toxic atmospheres may linger. Do not breathe vapors/fumes from fires or vapors from decomposition.
Flammable Properties and Hazards:	Vapors may settle in low or confined spaces. Aerosol container may erupt with force at temperatures above 50°C/122°F. Reacts violently with: Strong oxidizers.
Hazardous Combustion Products:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, carbonyl fluoride, hydrofluoric acid.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Use proper personal protective equipment as indicated in Section 8. Avoid breathing vapors and mists. Wear cold-insulating clothing and gloves. For very large spills, wear self-contained breathing apparatus before approaching the spill.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Steps To Be Taken In Case Material Is Released Or Spilled:	Remove all sources of ignition. For aerosol can size spill, leave the immediate spill area to avoid contact with the liquid. No containment required under normal circumstances. Ensure adequate ventilation, especially in low or enclosed areas. The product will turn gaseous and be dispersed. If it can safely be done, extinguish open flames or remove high temperature sources to avoid producing toxic decomposition products.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Keep upright when in use. Do NOT spray when container is more than 45 degrees off vertical or inverted. Wear cold-insulating gloves if exposure to liquid or aerosol jet is likely. Proper grounding procedures to avoid static electricity should be followed. Keep away from heat, sparks, and open flame. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Wear respiratory protection in cases of inadequate ventilation.
Precautions To Be Taken in Storing:	Store in a cool, dry, well-ventilated area away from incompatible substances. Do not store in direct sunlight. Store at temperatures not exceeding 50°C/122°F. Avoid extremely high or low temperatures. Store containers upright.
Other Precautions:	Handle empty containers with care because residual vapors are flammable. Pressurized container: Do not pierce or burn, even after use. Do not pressurize, cut, heat, or weld containers. Ruptured cylinders may rocket.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Equipment (Specify Type):	None required under normal conditions of use. High vapor/gas concentration: self-contained respirator. Maintain oxygen levels above 19.5% in the workplace. Use supplied air respiratory protection if oxygen levels are below 19.5% or during emergency response to a release of this product.
Eye Protection:	Safety glasses.
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Wear cold-insulating gloves if exposure to liquid or aerosol jet is likely.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Engineering Controls (Ventilation etc.):	Ensure adequate ventilation, especially in confined areas. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Proper grounding procedures to avoid static electricity should be followed.
Work/Hygienic/Maintenance Practices:	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using.
Environmental Exposure Controls:	Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	[X] Gas [] Liquid [] Solid
Appearance and Odor:	Appearance: Colorless liquefied gas, Odor: Mild. Slight. ether-like.
pH:	NA
Melting Point:	-117.00 C (-178.6 F)
Boiling Point:	-25.00 C (-13.0 F)
Flash Pt:	-50.00 C (-58.0 F)
Evaporation Rate:	NA
Flammability (solid, gas):	NFPA Aerosol Level 1.
Explosive Limits:	LEL: 3.5% UEL: 16.9%
Vapor Pressure (vs. Air or mm Hg):	5100 hPa at 21.0 C (69.8 F)
Vapor Density (vs. Air = 1):	NA
Specific Gravity (Water = 1):	NA
Density:	1004 KG/M3 at -25.0 C (-13.0 F)
Solubility in Water:	Negligible
Saturated Vapor Concentration:	NA
Octanol/Water Partition Coefficient:	No data.
Percent Volatile:	0.0 % by volume.
Autoignition Pt:	455.00 C (851.0 F)
Decomposition Temperature:	No data.
Viscosity:	0.37 - (dynamic) Pa-s at -31.0 C (-23.8 F)
Molecular Formula & Weight:	C2H2F4 102.031

10. STABILITY AND REACTIVITY

Reactivity:	Not reactive at normal temperatures and pressures. Reacts violently with: Strong oxidizers.
Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	Ignition sources, Incompatible materials, open flame, Extremes of temperature and direct sunlight. Contains gas under pressure; may explode if heated. Stable under recommended handling and storage conditions.
Incompatibility - Materials To Avoid:	Strong acids, Strong bases, Strong oxidizers.
Hazardous Decomposition or Byproducts:	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, carbonyl fluoride. hydrofluoric acid.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. TOXICOLOGICAL INFORMATION

Toxicological Information:	Epidemiology: No information available. Teratogenicity: No information available. Reproductive Effects: No information available. Mutagenicity: No information available. Neurotoxicity: No information available. Other Studies: CAS# 75-37-6: Acute toxicity, LC50, Inhalation, Mouse, 977 gm/m3 Acute toxicity, LDLO, Oral, Rat, 1500 mg/kg.
Irritation or Corrosion:	Contact with the liquid may cause frostbite due to heat lost caused by rapid evaporation. Aerosol jet can reach sub-zero temperatures; exposure to jet can lead to frostbite.
Symptoms related to Toxicological Characteristics:	Ingestion: Not a likely route of exposure. Inhalation: Exposure to high concentrations may cause dizziness, slight irritation, headache, nausea, vomiting, irregular heartbeat, confusion, apprehension, drowsiness, weakness, and unconsciousness. Skin Contact: Contact with the liquid may cause frostbite due to heat lost caused by rapid evaporation. Aerosol jet can reach sub-zero temperatures; exposure to jet can lead to frostbite. Eye Contact: Contact with gas/liquid escaping the container: May cause frostbite or freeze burns. May cause permanent damage.
Chronic Toxicological Effects:	Inhalation: Extreme exposure due to misuse and inhalation abuse may cause central nervous system depression and irregular heart beat.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. ECOLOGICAL INFORMATION

General Ecological Information:	Ecology - air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Included in the list of substances which may contribute to the greenhouse effect (Regulation (EC) No 842/2006). TA-LuftKlasse 5.2.5.
Results of PBT and vPvB assessment:	Ecology - water: Mild water pollutant (surface water) Ecotoxicity: No data available. No data available.
Persistence and Degradability:	No data available.
Bioaccumulative Potential:	Low potential for bioaccumulation (Log Kow < 4).
Mobility in Soil:	No data available.
Other adverse effects:	Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of contents and containers in accordance with local, regional, national, and international regulations.

14. TRANSPORT INFORMATION

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: 1,1-Difluoroethane [or] Refrigerant gas R 152a.
DOT Hazard Class: 2.1 FLAMMABLE GAS
UN/NA Number: UN1030



MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Aerosols, Flammable, 2.1., Limited Quantity.
UN Number: 1950 **Packing Group:**
Hazard Class: 2.1 - FLAMMABLE, 2.1, LIMITED QUANTITY **IMDG MFAG Number:**

IMDG EMS Page:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Aerosols, Flammable, 2.1., Limited Quantity.
UN Number: 1950 **Packing Group:**
Hazard Class: 2.1 - FLAMMABLE, 2.1, LIMITED QUANTITY **IATA Cargo Limit:** 150kg

Additional Transport Information: DOT Special Provisions (49 CFR 172.102): DOT-SP 11516: In accordance with this special permit, this product is not subject to labeling requirements unless offered for transportation by air. This product is not subject to placarding requirements. Outside packaging must be marked with proper shipping description and 'DOTSP 11516'.

DOT Packaging Exceptions (49 CFR 173.xxx): 306
 DOT Packaging Non Bulk (49 CFR 173.xxx): 304
 DOT Packaging Bulk (49 CFR 173.xxx): 314; 315.

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

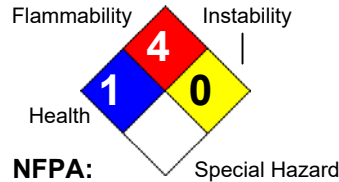
CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
75-37-6	1,1-Difluoroethane	No	No	No
CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists		
75-37-6	1,1-Difluoroethane	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory, 8D TERM; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: Yes; MI CMR, Part 5: No; NC TAP: No; NJ EHS: Yes - 0715; NY Part 597: No; PA HSL: No; SC TAP: No; WI Air: Yes		
CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists		
75-37-6	1,1-Difluoroethane	Canadian DSL: Yes; Canadian NDSL: No		

Regulatory Information: SARA Section 311/312 Hazard Classes:
 Fire hazard
 Sudden release of pressure hazard
 Immediate (acute) health hazard.

16. OTHER INFORMATION

Revision Date:	07/27/2021	Previous revision:	09/20/2018
Preparer Name:	Crystal Maira		

Hazard Rating System:



Additional Information: 07/27/2021 - Updated SDS to new format.

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