ITW Chemtronics® /Americas

152a Duster

The economical, medium pressure duster that removes particulates from many hard surfaces

152a Duster will quickly and efficiently remove light dust and debris. Its residue free and will not scratch delicate surfaces. Ideal for use on keyboards, electronics hardware and housings. 152a Duster should be handled as any flammable product and not used near open flames or other sources of ignition. It should not be sprayed near sources of potential static discharge.

152a Duster Features

- Contains no ozone depleting compounds
- Flammable
- Leaves no residue
- 63 psig at 70 ºF
- Nonabrasive; will not scratch delicate surfaces
- Excellent material compatibility
- Penetrates hard-to-reach areas

Typical Applications

152a Duster is engineered for all phases of electronic equipment maintenance, including:

- Audio/Video Equipment
- Fax Machines
- Keyboards
- Laboratory Instruments
- Microcomputers
- Photo Equipment
- Printers

Availability

ES1027 10 oz. (283.5 gram) Aerosol

CHEMTRONICS®
Technical Data Sheet

TDS # 1027

152a Duster

PRODUCT DESCRIPTION

152a Duster is an economical, medium pressure duster that removes particulates from many hard surfaces. Ideal for use on keyboards, electronic hardware, and housings, 152a Duster will quickly and efficiently remove light dust and debris. This duster is residue-free and won't scratch delicate surfaces. Not for use near flames, ignition sources, nor sources of static discharge.

- Contains no ozone depleting compounds
- Flammable
- Leaves no residue
- 63 psig at 70°F
- Nonabrasive
- Excellent material compatibility
- Penetrates hard to reach areas

TYPICAL APPLICATIONS

Duster is engineered for all phases of electronic equipment maintenance and is particularly suited for applications involving:

- Audio/Video Equipment
- Fax Machines
- Keyboards
- Laboratory Instruments
- Microcomputers
- Photo Equipment
- Printers

TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

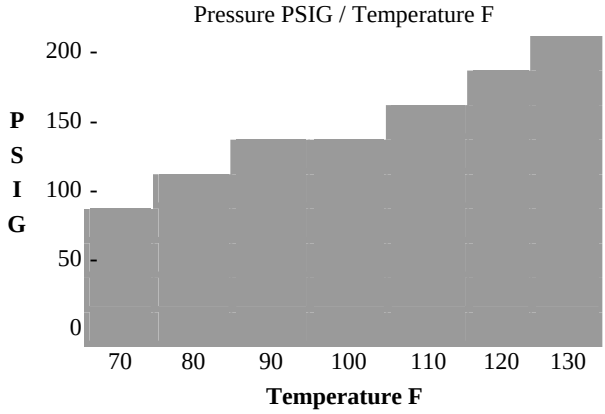
Boiling Point	-15.0°F
Vapor Density (air=1) @ 77°F	2.4
Solubility in Water @ 77°F F/1 atm	0.15% by weight
Specific Gravity (water = 1 @77°F)	1.22
Evaporation Rate (butyl acetate=1)	>1
Appearance	Clear, Colorless Gas
Odor	Slight Ethereal
Flammable limits in Air, % by Volume	LEL : 3.9 UEL : 16.9
Flash Point (TCC)	<-50 C (<-58 F)
Shelflife	5 years

COMPATIBILITY

152a Duster is generally compatible with most materials used in printed circuit board fabrication, including sensitive plastics and compounds. As with any duster/cleaner, compatibility must be determined on a non-critical area prior to use.

Material	Compatibility
Buna-N	Excellent
Graphite	Excellent
HDPE	Excellent
LDPE	Excellent
Lexan™	Excellent
Neoprene	Excellent
Cross-Linked PE	Excellent
Polyacrylate	Excellent
Polystyrene	Excellent
PVC	Excellent
Silicone Rubber	Excellent
Teflon™	Excellent
Viton™	Excellent

PERFORMANCE



USAGE INSTRUCTIONS

For industrial use only.
Read MSDS carefully prior to use.
No special surface preparation is required prior to using 152a Duster. Direct high pressure spray onto the area to be cleaned to remove dust, dirt and other contaminants. For optimum performance and pin point control, use 152a Duster with the attached extension tube. **Do not use near ignition sources or energized equipment. Do not spray into enclosed areas where flammable vapors may accumulate.**

AVAILABILITY

ES1027 10 oz. Aerosol

ENVIRONMENTAL IMPACT DATA

ENVIRONMENTAL IMPACT DATA			
CFC	0.0%	VOC	0.0%
HCFC	0.0%	HFC	100.0%
GWP	140	ODP	0.0

CFC, HCFC, VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. The ODP of this product is 0.0. It is the sum of the ODP of the substances that may contribute to the depletion of stratospheric ozone, based upon the weight of each substance in the product's formulation. Global warming potential (GWP) is calculated based on a 100 year time horizon. Carbon dioxide has a GWP of 1.

NOTE:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. CHEMTRONICS® does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Information: 800-TECH-401

Product Identification

152a DUSTER

Product Code: ES1027

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. % Range
1,1-difluoroethane	75-37-6	100%

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: Clear, colorless liquefied gas. This product is flammable. Exposure to liquid may cause frostbite.
Eyes: Contact with liquid is irritating and may cause frostbite.
Skin: Contact causes skin irritation; prolonged contact can cause frostbite.
Ingestion: Unlikely due to volatile nature of product. Contact with liquid may cause frostbite to mouth and throat tissues.
Inhalation: Harmful if inhaled. High concentrations of vapors in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death. Cardiac sensitization may result in irregular pulse and palpitations. Keep away from high concentrations of vapors without self-contained breathing apparatus.
Pre-Existing Medical Conditions Aggravated by Exposure: Heart, lung, kidneys, CNS, skin, eye.

SECTION 4: FIRST AID MEASURES

Eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Treat for possible frostbite. Have eyes examined and tested by medical personnel if symptoms develop or persist.
Skin: Immediately wash skin with soap and water. Remove contaminated clothing. Treat for possible frostbite. Get medical attention if symptoms develop or persist. Wash clothing separately before reuse.
Ingestion: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting. Treat for possible frostbite. Get immediate medical attention.
Inhalation: Remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: Less than -58°F (less than -50°C) (TCC) LEL/UEL: 3.9 / 16.9 (% by volume in air)
Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Large Spills: Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Ventilate area well.
Small Spills: Evacuate area. Ventilate well before allowing employees to return.

SECTION 7: HANDLING AND STORAGE

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Use only with adequate ventilation. Avoid breathing product vapor or mist. Store in a cool dry place away from heat, sparks and flame. Do not store in direct sunlight or in enclosed vehicle.
KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	OTHER (DUPONT) AEL
1,1-difluoroethane	NA	NA	1,000 ppm

AEL = Acceptable Exposure Limit

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	4	4
Reactivity	1	1
Personal Protection	-	B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, colorless liquefied gas
Odor: Slight ethereal odor
pH: NA
Vapor Pressure: 4579 mmHg @ 77°F
Vapor Density: 2.4 @ 77F
(Air = 1)
Solubility in Water: 0.28% @ 77F
Specific Gravity: (Water =1) 0.90
Evaporation Rate: >1
(Butyl acetate=1)
Percent Volatile: 100%
Boiling Point: -13°F (-25°C)

SECTION 10: STABILITY AND REACTIVITY

Stability: This product is stable. Conditions to Avoid: Do not spray near open flames, red hot surfaces or other sources of ignition.
Incompatibility: Do not mix with powdered alkali and alkaline earth metals or strong oxidizing agents.
Products of Decomposition: Thermal decomposition may release hydrofluoric acid vapor and possibly carbonyl fluoride.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: NA

SECTION 11: TOXICOLOGICAL INFORMATION

Ingestion:

1,1-difluoroethane *	Rats ALD	>1500 mg/kg

Inhalation:

1,1-difluoroethane *	Rats ALC	383,000 ppm/4hrs

*Information from Dupont.
Cancer Information: No ingredients listed as human carcinogens by NTP or IARC
Reproductive effects: none Teratogenic effects: none Mutagenic effects: none

SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Information
Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

REPORTING
US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is: **1-800-424-8802**

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations.

SECTION 14: TRANSPORTATION INFORMATION

	Proper Shipping Name	UN Number	Hazard Class	Sub. Risk	Pkg. Group	Hazard Label	Pkg. Instr.	Max. Quantity
Air:	1,1-difluoroethane	UN 1030	2.1	NA	NA	Flammable Gas Cargo Aircraft Only	200	150kg
Ground:	1,1-difluoroethane (Under DOT exemption DOT-SP 11516)	UN1030	2.1	NA	NA	NA	173.304	

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION
This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).
This information should be included on all MSDSs copied and distributed for this material.
TOXIC SUBSTANCES CONTROL ACT (TSCA).
All ingredients of this product are listed on the TSCA Inventory.
WHMIS: Class A; Class B5; Class D2B
This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

Product is a Level 1 aerosol. Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.