

## Electronics



## 152a Blast™

***The economical, general purpose duster with a bigger blast for cleaning applications***

152a Blast™ is engineered to remove dirt, dust, oxide particles and other airborne particles instantly. The exceptionally pure jet from 152a Blast™ can also be used to facilitate the accelerated drying of solvent cleaners. This product should be handled as any flammable material and not used near open flames or other ignition sources and it should not be sprayed around sources of potential static discharge.

### 152a Blast™ Features

- High pressure for contamination control
- Is Ozone safe and CFC and HCFC free
- Flammable
- 63 psig at 70 °F
- Non abrasive and safe for most materials; will not scratch surfaces
- No residue
- Clean hard-to-reach areas

### Typical Applications

152a Blast™ can be used in a wide range of applications, including:

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

### Availability

ES1029 10 oz. (283.5 grams) Aerosol



**Technical Data Sheet****152a Blast™****PRODUCT DESCRIPTION**

152a Blast™ is an economical general-purpose duster with a bigger blast for cleaning applications. Its exceptional purity jet instantly cleans surfaces free of particulate contamination. 152a Blast™ is engineered to remove dirt, dust, oxide particles and other airborne particles instantly, and can be used to facilitate the accelerated drying of solvent cleaners. Not for use near flames, ignition sources, nor sources of static discharge.

- High pressure for contamination control
- Ozone safe; CFC and HCFC free
- Flammable
- 63 psig at 70°F
- Nonabrasive; safe for most materials.  
Will not scratch surfaces
- No residue
- Cleans hard to reach areas

**TYPICAL APPLICATIONS**

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- Audio/Video Equipment
- Fax Machines
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**TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES**

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

**COMPATIBILITY**

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

| <u>Material</u> | <u>Compatibility</u> |
|-----------------|----------------------|
| 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            |

**AVAILABILITY**  
 ES1029 10 oz. Aerosol

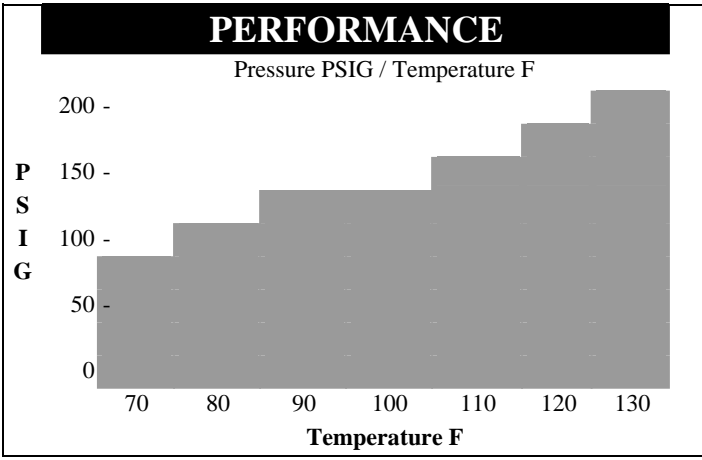
**ENVIRONMENTAL IMPACT DATA**

| 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. ITW CHEMTRONICS® does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

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**USAGE INSTRUCTIONS**

For industrial use only.  
 Read MSDS carefully prior to use.  
 No special surface preparation is required prior to using 152a Blast™. Direct high pressure spray onto the area to be cleaned to remove dust, dirt and other contaminant. For optimum performance and pin point control, use 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.**

**SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**

Product Information: 800-TECH-401

**Product Identification****152a BLAST™****Product Code: ES1029****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 |
|---|-----------|--------------|-----------|------------|--------------------------------------|-------------|---------------|
| <u>Air:</u> 1,1-difluoroethane  | UN 1030   | 2.1          | NA        | NA         | Flammable Gas<br>Cargo Aircraft Only | 200         | 150kg         |
| <u>Ground:</u> 1,1-difluoroethane<br>(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.