

ITW CHEMTRONICS

MSDS #1029

SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION**Company Address:**8125 Cobb Center Drive
Kennesaw, GA 30152Product Information: 800-TECH-401
Customer Service: 800-645-5244Emergency: (Chemtree) 800-424-9300
Revision Date: February 10, 2007**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 @ 77°F

(Air = 1)

Solubility in Water: 0.28% @ 77°F**Specific Gravity:** (Water = 1) 0.90**Evaporation Rate:** >1

(Butyl acetate=1)

Percent Volatile: 100%**Boiling Point:** -13°F (-25°C)

ITW CHEMTRONICS**MSDS #1029****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 Cargo Aircraft Only	200	150kg
<u>Ground:</u>	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.