SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Company Address:
8125 Cobb Center Drive
Kennesaw, GA 30152

Product Information: 800-TECH-401 Emergency: (Chemtrec) 800-424-9300
Customer Service: 800-645-5244 Revision Date: March 14, 2011

Product Identification

Arctic Blast™ Anti-Stat Freeze Spray

Product Code: ES1055

SECTION 2: HAZARDS IDENTIFICATION

Emergency Overview: Clear, colorless liquefied gas. This product is nonflammable. Exposure to liquid may cause frostbite.
Eyes: May be irritating. Contact with liquid is irritating and may cause frostbite.
Skin: Contact causes frostbite; prolonged contact can cause skin irritation.
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 drowsiness, dizziness, unconsciousness, and even death with longer exposure. Other symptoms of overexposure are headache, nausea, palpitations, respiratory disorders and rapid respiration. Keep people away from such vapors without self-contained breathing apparatus.
Pre-Existing Medical Conditions Aggravated by Exposure: Heart, lung, skin, eye.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. % Range
trans-1,3,3,3-tetrafluoroprop-1-ene	29118-24-9	98.5 to 99.9%
Methanol	67-56-1	0.1 to 1.5%

SECTION 4: FIRST AID MEASURES

Eyes: Treat for possible frostbite, then flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.
Skin: Treat for possible frostbite, then wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persist. Wash clothing separately before reuse.
Ingestion: Treat for possible frostbite.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. Vapors are heavier than air and can cause suffocation by reducing available oxygen.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None to boiling (TCC) LEL/UEL: Nonflammable Ignition temperature: 368C (694F)
Extinguishing Media: Use foam, carbon dioxide, or water spray when fighting fires involving this material. Use extinguishing measures appropriate for surrounding fire.
Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear. Contents under pressure and heat will raise pressure with a risk of bursting. Cool containers close to fire with water. This material is not normally combustible but can ignite when mixed with air, under pressure and with strong ignition sources. Fire may cause evolution decomposition products (including hydrogen fluoride) which may be corrosive, toxic and be hazardous to health. Fire or intense heat may cause rupture of package.
Protective Equipment for Fire-Fighters: Wear self-contained breathing apparatus and protective suits. No exposed skin.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Remove all sources of ignition. Avoid skin contact with leaking liquid, danger of frostbite. Ventilate area. Evacuate personnel to safe areas. Wear personal protective equipment. Vapors are heavier than air. Avoid accumulation of vapors in low areas.
Environmental Precautions: Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.
Methods for Clean-Up: Allow to evaporate.

SECTION 7: HANDLING AND STORAGE

Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Avoid breathing product vapor or mist. Do not reuse this container. Do not pierce or burn, even after use. Do not spray on naked flame or any incandescent material.
Storage: Store in a cool dry ventilated place away from heat, sparks and flame at temperatures not exceeding 50C. Keep container closed when not in use. Do not store in direct sunlight. Do not store together with oxidizing agents.
KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	OTHER (Honeywell) AEL
Trans-1,3,3,3-tetrafluoroprop-1-ene	NA	NA	1,000 ppm
Methanol	200 ppm	200 ppm	250 ppm

AEL = Acceptable Exposure Limit
Work/Hygienic Practices: Avoid contact with skin, eyes and clothing. Keep working clothes separate. Do not smoke. Avoid breathing mist, vapors or gas.
Respiratory protection: 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 ventilation is inadequate or excessive vapors accumulate, wear a positive pressure supplied-ar respirator.. Wear safety glasses with side shields (or goggles) and heat/cold resistant gloves when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	0	0
Reactivity	1	1
Personal Protection	-	B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, colorless compressed liquefied gas
Odor: Slight characteristic odor
pH: NA
Vapor Pressure: 4192 hPa @ 68°F (20C)
Boiling Point: -2F (-19C)
Percent Volatile: 100%
Solubility in Water: 37.3mg/1 @ 70F
Specific Gravity: (Water =1) 1.13
Evaporation Rate: >>1
(Butyl acetate=1)
Vapor Density: 4

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.
Hazardous Polymerization: Will not occur
Conditions to Avoid: NA

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation:

trans-1,3,3,3-tetrafluoroprop-ene	Rats LC50	>207,000ppm/4hrs
Methanol	Rats LC50	64,000 ppm/4hrs

Cancer Information: No ingredients listed as human carcinogens by OSHA, 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.
Toxicity to Fish: NOEC, Carp, Dose:>117 mg/l, Exposure: 96h
Toxicity to daphnia and aquatic invertabrates: EC50, dahnia magna (water flea), Dose: >160 mg/l, Exposure: 48h
Toxicity to algae: Growth inhibition NOEC, Species: Algae, Dsoe: >170mg/l, Exposure time: 72 h
Not readily biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

SECTION 14: TRANSPORTATION INFORMATION

	Proper Shipping Name	UN Number	Hazard Class	Sub. Risk	Pkg. Group	Hazard Label	Pkg. Instr.	Max. Quantity
Air:	Refrigerant Gas n.o.s. (trans-1,3,3,3-tetrafluoroprop-ene)	UN 1078	2.2	NA	NA	2.2	200	75kg;150kg
Ground:	Consumer Commodity ORM-D	NA	ORM-D	NA	NA	ORM-D	173.306	

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION
This product contains the following 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).

Chemical Name	**CAS#**	**Wt. % Range**
Methanol	67-56-1	0.1-1.0

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 D2B
Canada/WHMIS: This product is not listed on the Canadian Environmental Protection Act (CEPA) Domestic Substances List (DSL) nor NDSL.
WHMIS Classification: A, 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.