

GC/Waldom Electronics
1801 Morgan Street
Rockford, IL 61102
Product Information: (815) 968-9661

Product Name: GC STATIC FREE FREEZE MIST

MSDS Number: 164
Revision Date: 1/17/03
Supersedes Date: 2/1/01

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type: **Freeze**
Product Name: **GC Static Free Freeze Mist**
Part Number(s): **19-8410-00SF**

Emergency Contact: **Chemtrec**
Phone (24 hours): **(800) 424-9300**

Section 1 - Identification of Product

COMMON NAME (used on label)(Trade Name & Synonyms): **GC Static Free Freeze Mist**
CAS. NUMBER: See Section 2
CHEMICAL NAME: 1,1,1,2-Tetrafluoroethane
CHEMICAL FAMILY: Hydrofluorocarbon
FORMULA: Not Applicable

HMIS RATINGS			
	Minimal Hazard		0
	Slight Hazard		1
Health: 2	Moderate Hazard		2
Flammability: 0	Serious Hazard		3
Reactivity: 0	Severe Hazard		4
Personal Protection: B	Gloves, Safety Glasses	B	

Section 2 - Hazardous Ingredients

Principal Hazardous Component(s)

CHEMICAL AND COMMON NAME(S)	CAS. #	OSHA PEL	ACGIH TLV	VAPOR PRESSURE @25 DEG. C.	LEL	UEL	FLASH POINT DEG. F
1,1,1,2-Tetrafluoroethane	811-97-2	N/A*	N/A*	96 psia		Nonflammable	None

*Limit established by The E.I. DuPont Company is 1000ppm

NOTE: This product does not contain any ingredients subject to Section 313 of SARA Title III.

N/A is not available or not applicable

Section 3 - Physical Data

BOILING POINT (Deg. F): -15

SPECIFIC GRAVITY (Water = 1): 1.21

VAPOR PRESSURE (mmHg): See Section 2

PERCENT VOLATILE BY WEIGHT (%): 100%

PERCENT VOLATILE ORGANIC COMPOUNDS: 0%

VAPOR DENSITY (Air = 1): >1

EVAPORATION RATE (BA = 1): >1

SOLUBILITY IN WATER: Substantial

REACTIVITY IN WATER: None

APPEARANCE AND ODOR: Clear gas at standard temperature and pressure with a slight ethereal odor; FINISHED

PACKAGE: Aerosol container filled with liquefied gas.

Section 4 - Fire & Explosion Hazard Data

FLASH POINT: See Section 2

FLAMMABLE LIMITS IN AIR - % BY VOLUME: See Section 2

EXTINGUISHER MEDIA: Use media appropriate for surrounding material

AUTO-IGNITION TEMPERATURE: >1369 Deg. F

SPECIAL FIRE FIGHTING PROCEDURES: Water may be used to cool closed containers to prevent pressure build-up and possible bursting when exposed to high temperatures. Firemen should wear self-contained, positive pressure, respiratory equipment. Hazardous decomposition products.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure. Keep temperature of containers below 120 Deg. F to prevent bursting. Exposure to temperature above 120 Deg. F may cause can to burst with violence and cause injury.

Section 5 - Health Hazard Data

THRESHOLD LIMIT VALUE: See Section 2

SIGNS AND SYMPTOMS OF EXPOSURE:

EYE CONTACT: Liquid contact can cause frostbite.

SKIN CONTACT: Liquid contact can cause frostbite.

INHALATION: Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause lightheadedness, giddiness, shortness of breath, and may lead to narcosis, cardiac irregularities, unconsciousness or death. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS OF THE CAN MAY BE HARMFUL OR FATAL.

EMERGENCY AND FIRST AID PROCEDURE

INHALATION: If high concentrations are inhaled: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Do not give epinephrine or similar drugs. Call a physician.

EYES: In case of eye contact, immediately flush eyes with plenty of cold water. Call a physician.

SKIN: In case of skin contact, flush with water. Treat for frostbite if necessary.

INGESTION: Ingestion is not considered a potential route of exposure.

NOTE TO PHYSICIANS: BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD ONLY BE USED WITH SPECIAL CAUTION IN SITUATIONS OF EMERGENCY LIFE SUPPORT.

Section 6 - Reactivity Data

STABILITY: Stable

CONDITIONS TO AVOID: Avoid any excessive heat, ignition sources, open flames, or other high temperatures which induce thermal decomposition.

INCOMPATIBILITY (Materials to Avoid): Alkali or alkaline earth metals - powdered Aluminum, Zinc, Be, etc.

HAZARDOUS DECOMPOSITION PRODUCTS: This material can be decomposed by high temperature (open flames, flowing metal surfaces, etc.) forming hydrofluoric acids and possibly carbonyl halides.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Not Applicable

Section 7 - Spill or Leak Procedures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILLS: Remove ignition sources. Mop up, wipe up, or soak up immediately. Use proper protective equipment.

LARGE SPILLS: Evacuate area. Remove ignition sources. Contain liquid; transfer to closed containers; keep out of water supplies.

WASTE DISPOSAL METHODS: Dispose in accordance with Federal, State, and Local regulations. Do not incinerate closed or empty containers.

Section 8 - Special Protection Information

RESPIRATORY PROTECTION: Under normal use conditions, no respiratory protection is required. Self-contained breathing apparatus (SCBA) is required if a large spill or release occurs.

VENTILATION:
LOCAL EXHAUST: To keep below TLV
MECHANICAL (General): To keep below TLV
SPECIAL: None
OTHER: None

PROTECTIVE GLOVES: Lined butyl gloves should be worn when handling liquid.

EYE PROTECTION: Safety glasses or goggles should be worn when handling liquid.

OTHER PROTECTIVE CLOTHING

OR EQUIPMENT: None reasonably foreseeable.

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Section 9 – Special Precautions**PRECAUTIONS TO BE TAKEN
IN HANDLING AND STORAGE:**

Liquid contents may cause frostbite on contact with skin; therefore, do not tilt, shake, or turn can upside down before or during use. Do not store above 110 Deg. F. Do not use or store near any open flames or ignition sources.

OTHER PRECAUTIONS:

Contents under pressure. Do not puncture or incinerate. Exposure to temperatures above 120 Deg. F may cause can to burst with violence and cause injury. Vapors are heavier than air and will collect in low areas.

Section 10 - Regulatory Information

NOT SUBJECT TO SECTION 3113 OF SARA TITLE III

ALL CHEMICAL COMPONENTS ARE LISTED IN THE TSCA INVENTORY.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: NATIONAL TOXICOLOGY PROGRAM: No

I.A.R.C. MONOGRAPHS: No

OSHA: No

OSHA PERMISSIBLE EXPOSURE LIMIT: See Section 2

ACGIH THRESHOLD LIMIT VALUE: See Section 2

OTHER EXPOSURE LIMITED USED: None

Section 11 - Other Information**TRANSPORTATION INFORMATION – DOMESTIC GROUND**

Shipping Name: 1, 1, 1, 2-Tetrafluoroethane

Hazard Class: 2.2

UN Number: UN3159

Packing Group: N/A

Hazard Label: ORM-D

Carton Marking: ORM-D

Description: 134A Refrigerant, complies with DOT-E10232

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