

**SAFETY DATA SHEET**

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

**Product Name: GC STATIC FREE AIR JET**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product Type: Air Jet  
Product Name: **GC STATIC FREE AIR JET**  
Part Number(s): **19-8475-SF**

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

**SECTION 2: HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

OSHA HCS (29 CFR 1910.1200)

Liquefied gas; Simple Asphyxiant

**Label elements**

Hazard Symbol



**WARNING**

Signal word(s)

Hazard Statement(s)

Contains gas under pressure; may explode if heated.  
May displace oxygen and cause rapid suffocation.

Precautionary Statement(s)

Protect from sunlight and do not expose to temperatures exceeding 50 °C/122 °F.  
Store in a well-ventilated place. Do not use in confined spaces.  
Avoid breathing gas.  
Keep out of reach of children.

**Other hazards**

Intentional inhalation of gas from the container may be fatal.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification
1,1,1,2-Tetrafluoroethane	99.7059	811-97-2	Liquefied Gas; H280 Simple Asphyxiant
Denatonium benzoate^	0.0008	3734-33-6	Acute Tox. 4; H302; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412

**Additional Information** - ^Denaturant

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#### SECTION 4. FIRST AID MEASURES



##### Description of first aid measures

Inhalation	Move person to fresh air. If breathing is labored, administer oxygen. If symptoms develop, obtain medical attention.
Skin Contact	Wash affected skin with soap and water. If symptoms develop, obtain medical attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms occur obtain medical attention.
Ingestion	Unlikely to be required but if necessary treat symptomatically. Do not give anything by mouth to an unconscious person. Seek medical treatment.

##### Most important symptoms and effects, both acute and delayed

Liquid contact with skin or eyes may cause frostbite.

##### Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

#### SECTION 5: FIRE-FIGHTING MEASURES

##### Extinguishing Media

-Suitable Extinguishing Media	Non-combustible. As appropriate for surrounding fire.
-Unsuitable Extinguishing Media	None anticipated

##### Special hazards arising from the substance or mixture

None

##### Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid breathing gas.

##### Environmental precautions

Not normally required.

##### Methods and material for containment and cleaning up

Gaseous. Not normally required.

##### Reference to other sections

None



1801 Morgan Street  
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#### SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

Avoid contact with skin and eyes. Use product in a well-ventilated area only. Do not use in confined spaces.

**Conditions for safe storage, including any incompatibilities**

-Storage temperature

Keep in a cool, well ventilated place. Store at temperatures not exceeding 50 °C / 122 °F.

-Incompatible materials

This product should be stored away from sources of strong heat or oxidizing chemicals. Materials to avoid: Finely divided metals, Magnesium or alloys containing 2% or more of Magnesium. Reacts violently with Alkali and Alkaline Earth metals such as: Potassium, Sodium or Barium.

**Specific end use(s)**

Electronics cleaner

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
1,1,1,2-Tetrafluoroethane	811-97-2	-----	-----	-----	-----	#

#Assure minimum oxygen content of work atmosphere.

**Recommended monitoring method**

Electrochemical sensor (% O<sub>2</sub>)

**Exposure controls**

**Appropriate engineering controls**

Ensure adequate ventilation.

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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (CONTINUED)

##### Personal protection equipment

Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)

Not normally required



Respiratory protection

Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment.



Thermal hazards

Not normally required. Use gloves with insulation for thermal protection, when needed.

##### Environmental Exposure Controls

None known

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

##### Information on basic physical and chemical properties

Appearance	Liquified gas
Color	Colorless
Odor	Ethereal
Odor Threshold (ppm)	Not available
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	-108
Boiling point/boiling range (°C):	-26
Flash Point (°C)	Gaseous - Not applicable
Evaporation Rate	Gaseous
Flammability (solid, gas)	Non-flammable
Explosive Limit Ranges	Non-flammable
Vapor pressure (Pascal)	$5.8 \times 10^5$ (@ 21°C)
Vapor Density (Air=1)	3.52 (@ 25°C)
Density (g/ml)	Not available
Solubility (Water)	0.95% (@ 21°C)
Solubility (Other)	Not available
Partition Coefficient (n-Octanol/water)	Not available
Auto Ignition Point (°C)	>743



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#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
<b>Other information</b>	Not available

#### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable.
<b>Possibility of hazardous reactions</b>	None anticipated.
<b>Conditions to avoid</b>	Avoid contact with heat and ignition sources.
<b>Incompatible materials</b>	Strong oxidizing agents. Materials to avoid: Finely divided metals, Magnesium or alloys containing 2% or more of Magnesium. Reacts violently with Alkali and Alkaline Earth metals such as: Potassium, Sodium or Barium.
<b>Hazardous decomposition product(s)</b>	Halogen acids by thermal decomposition.

#### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Exposure routes:</b> Inhalation, Skin Contact, Eye Contact	
Acute toxicity (Inhalation)	LCLo >= 567000 ppm 4 hr exposure

#### SECTION 12: ECOLOGICAL INFORMATION

<b>Aquatic toxicity:</b>	
Short term	Not available
Long Term	Not available

#### SECTION 13: DISPOSAL CONSIDERATIONS

<b>Waste treatment methods</b>	Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.
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### SECTION 14: TRANSPORT INFORMATION

	<u>U.S. DOT</u>	<u>Sea transport (IMDG)</u>	<u>Air transport (ICAO/IATA)</u>
UN number	3159	3159	3159
Proper Shipping Name	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane	1,1,1,2-Tetrafluoroethane
Transport hazard class(es)	2.2	2.2	2.2
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	None assigned	None assigned	None assigned
Special precautions for user	None assigned	None assigned	None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

### SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
None	----	----	----

SARA 311/312 - Hazard Categories:

- Fire   
  Sudden Release   
  Reactivity   
  Immediate (acute)   
  Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	----	----

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None	----	----	----

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
None	----	----



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### SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: October 23, 2014

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

#### Hazard Statement(s)

- H225: Highly flammable liquid and vapour.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

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