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MSDS Number: 150B
 Revision Date: 10/20/2014
 Supersedes Date: 10/17/2014

SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Name: GC AIR JET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Type: Air Jet
 Product Name: **GC AIR JET**
 Part Number(s): **19-8475**
 19-8475-10
 19-8508

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

Product identifier

Chemical Name	1,1,1,2-Tetrafluoroethane
CAS No.	811-97-2
Trade Name	GC Waldom Static Free Airjet
Product Code	M-5598

HMIS RATINGS

Health:	2
Flammability:	1
Physical Hazard:	0

Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Dusting Agent
Uses Advised Against	None

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	Liquefied gas; Simple Asphyxiant
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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.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt.	CAS No.	Hazard classification
1,1,1,2-Tetrafluoroethane	100	811-97-2	Liquified Gas; H280 Simple Asphyxiant

Additional Information - None

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.



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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
Additional Information	None

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)	Dusting Agent

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

SUBSTANCE.	CAS No.	(8hr TWA)		(STEL)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
None	811-97-2	-----	-----	-----	-----	#

*Assure minimum oxygen content of work atmosphere.

Recommended monitoring method	Electrochemical sensor (% O ₂)
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)

Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber)



Respiratory protection

Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. A dust mask is not acceptable.



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



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (CONTINUED)

Vapor pressure (Pascal)	5.8 x 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
Decomposition Temperature (°C)	Not available
Kinematic Viscosity (cSt)	Not available
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Other information	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Avoid contact with heat and ignition sources.
Incompatible materials	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.
Hazardous decomposition product(s)	Halogen acids by thermal decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Acute toxicity (Inhalation)	LCLo >= 567000 ppm 4 hr exposure
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SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity:	
Short term	Not available
Long Term	Not available



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SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

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-Tetrafluorethane	1,1,1,2-Tetrafluorethane	1,1,1,2-Tetrafluorethane
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.
Isopropanol	67-63-0	0.0087

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: July 31, 2014

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

Hazard Statement(s)

- H280: Contains gas under pressure; may explode if heated.

Training advice: None.

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