

AEROSOLS

Formulating the Future

GC Electronics has been the primary supplier of electronics to the electrical and electronic industries since 1930. In 1997, GC upgraded its technology base to include the new environmental laws. GC has come up with a starting line-up of contact cleaners to comply with these laws; Big Bath, and Big Bath ISO. Big Bath ISO is a new contact cleaner that is non-ozone depleting and can be sold to anyone. Plus, it contains no CFC's or HCFCs and is safe on all plastics.

GC offers a complete line of chemicals for use by electronics, electrical and industrial users. In addition to offering the most up-to-date line of aerosols, GC also supplies hard-to-find non-aerosols. GC also offers a broad range of adhesives, heat sink compounds, lubricants and conformal coatings.



Air Jet®

Air Jet is formulated for the dusting and cleaning of components and equipment. Air Jet contains no flammable additives. This high pressure product is used for blowing dust, dirt and residue out of hard to reach places without scratching. Air Jet is an excellent product for both home and office use.

Applications: Computers, keyboards, printers, fax machines, audio equipment, video equipment, typewriters.

Air Jet contains no ozone depleting chemicals. Anti static formulation minimizes the risk of electrostatic damage to sensitive components.

Part No. 19-8508	8 oz. Aerosol
Part No. 19-8475-10	10 oz. Aerosol
Part No. 19-8475	12 oz. Aerosol
Part No. 19-8475-SF	12 oz. Anti-Static Aerosol



Freeze Mist

Freeze Mist is a refrigerant spray used to locate thermal intermittents in electronic components such as capacitors, resistors and semi-conductors. Great for removing chewing gum from fabrics, freezing adhesives for easy removal, protecting heat sensitive components during soldering or for thermal fitting metal parts. The flow control trigger nozzle enables the user to apply the product with pinpoint accuracy and reduce product usage.

Applications: Avionics, electronic equipment, computers.

Freeze Mist contains no ozone depleting chemicals. The anti static formulation minimizes the risk of electrostatic damage to sensitive components.

Part No. 19-8410-6	6 oz. Aerosol
Part No. 19-8410-10	10 oz. Aerosol
Part No. 19-8410	12 oz. Aerosol
Part No. 19-8410-SF	12 oz. Anti-Static Aerosol

NON-AEROSOL CLEANERS



Isopropyl Alcohol (Anhydrous)

This extremely pure (99.9%) alcohol is frequently the recommended cleaner by manufacturers of tape heads, disc drives, etc. Does an excellent job of dissolving and removing oxides from recording heads, also an excellent degreaser. Leaves no residue. This is not an aerosol, but an aerosol-style can with a snap on top. Suggested for use with swabs, clean cloth, or by immersion or trigger sprayer.

Part No. 10-1507	16 fl. oz.
Part No. 10-1507-G	1 gal.
Part No. 10-1507-6G	6 gal.

MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

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

Section 1 - Identification of ProductCOMMON NAME (used on label)(Trade Name & Synonyms): **GC Anti-Static Freeze Mist**

PRODUCT DESCRIPTION: HFC-134a with Anti-stat

CHEMICAL NAME: 1,1,1,2-Tetrafluoroethane

CHEMICAL FAMILY: Hydrofluorocarbon

HMIS RATINGS

Health: 1
 Flammability: 0
 Physical Hazard: 1

NFPA CODES

Health: 1
 Flammability: 0
 Physical Hazard: 1

Least 0
 Slight 1
 Moderate 2
 High 3
 Extreme 4
 Gloves, Safety Glasses B

Section 2 - Hazardous Ingredients


OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

CHEMICAL AND COMMON NAME(S)	CAS. #	Wt %		OSHA PEL		EXPOSURE LIMITS		
				ppm	mg/m ³	ACGIH TLV	Supplier	
1,1,1,Tetrafluoroethane (HFC-134a)	811-97-2	98	TWA	NE		ppm	mg/m ³	ppm
				S200	260	S200	262	1,000
								ppm ⁽¹⁾
Methanol	67-56-1	2	TWA	ppm ⁽²⁾	mg/m ³	ppm	mg/m ³	NL ppm
				STEL	250 ppm	310	250	328
					mg/m ³	ppm	mg/m ³	NL ppm

OSHA TABLE COMMENTS:

- *(AEL)=Acceptable Exposure Limit as established by the manufacturer
- S=Skin

EEC LABEL SYMBOL AND CLASSIFICATION

 R20/22 – Harmful by inhalation and if swallowed.

EEC Harmful – “Xn”

Section 3 - Physical Data

PHYSICAL STATE:	Gas
ODOR:	Faint ethereal odor
pH:	Neutral
PERCENT VOLATILE:	100 at 68°F (20°C)
VAPOR PRESSURE:	85.8 psi at 70°F (21.1°C)
VAPOR DENSITY:	3.5 (Air=1)
BOILING POINT:	-15.1°F (-26.2°C)
FREEZING POINT:	-149.8°F (-101°C)
SOLUBILITY IN WATER:	Negligible
EVAPORATION RATE:	>1 (CCL4=1)
SPECIFIC GRAVITY:	1.22 (water=1) at 68°F (20°C)
MOLECULAR WEIGHT:	102

Section 4 - Fire & Explosion Hazard Data

FLASH POINT AND METHOD:	Not Applicable
FLAMMABLE LIMITS:	None*
EXTINGUISHING MEDIA:	As appropriate for combustibles in area
AUTO-IGNITION TEMPERATURE:	>1382°F (750°C)
FLAME PROPAGATION OR BURNING RATE OF SOLIDS:	Not Applicable
EXPLOSION HAZARDS:	This product is not flammable at ambient temperatures and atmospheric pressure. However, this material may become combustible when mixed with air under pressure and exposed to strong ignition sources.
FIRE FIGHTING PROCEDURES:	Use water spray to cool containers.
FIRE FIGHTING EQUIPMENT:	As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

COMMENTS: *Based on ASHRAE Standard 34 with match ignition

Section 5 - Health Hazard Data

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear, Colorless, Volatile Liquid

Section 10 - Regulatory Information
--

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 Hazard Categories: Immediate/Pressure

Fire: No Pressure Generating: Yes Reactivity: No Acute: Yes Chronic: No

313 Reportable Ingredients: Methanol (<1%)

302/304 Emergency Planning

Emergency Plan: Methanol (#67-56-1)

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Releases to air, land, or water which exceed the RQ must be reported to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.
Methanol (#67-56-1)

CERCLA RQ: 5000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product is listed on the TSCA Inventory.

RCRA STATUS: U154

OSHA HAZARD COMM. RULE: Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1919.1200

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR 1910.119 – PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS

CHEMICALS: None of the chemicals in this product are considered highly hazardous by OSHA.

CANADA

WHMIS (WORKER HAZARDOUS

MATERIALS INFORMATION SYSTEM): This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

WHMIS CLASS: Class A, Class D2B

DOMESTIC SUBSTANCE LIST

(INVENTORY): All components of this product are listed on the Canadian DSL.

EUROPEAN COMMUNITY**EEC LABEL SYMBOL AND CLASSIFICATION**

R20/22 – Harmful by inhalation and if swallowed

EEC Harmful – “Xn”