

MATERIAL SAFETY DATA SHEET

ATLANTIC CHEMICAL & EQUIPMENT CO. INC
3471 Atlanta Industrial Parkway – Ste 200 * Atlanta, GA 30331
Tel: 800 929-2436 Fax: 404-505-9607

EMERGENCY PHONE: CHEMTREC 1 800 424 9300

Product Name: GemTech Flush (GTUF1)

Date: 09/2010

Rev: 11/29/10

Form: Liquid Form 1 pound aerosol cans

Hazardous Ingredient/Identity Information

<u>CHEMICAL NAME</u>	<u>CAS#</u>	<u>OSHA PEL</u> (8 hr. TWA)	<u>ACGIH TLV</u> (8 hr. TWA)	<u>%</u>
Tetrafluoroethane	811-97-2	1000 ppm	1000 ppm	10 - 20%
1,1,1,2,3,4,4,5,5,5-Decafluoropentane	138495-42-8	N/E	N/E	15 - 18%
Trans, 1,2-dichloroethylene	156-60-5	200 ppm	200 ppm	40 - 60%
Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	5 - 10%
1,1,1,3,3-Pentafluorobutane	406-58-6	N/E	N/E	8 - 10%

(* N/E = None Established ** N/A = Not Available)

Physical / Chemical Characteristics

Appearance and Odor	Clear, colorless liquid, slight Ethereal
Boiling Point	41°C 106°F
Vapor Pressure (Range)	5.5 psia at @ 20°C / 77° F
Vapor Density (AIR = 1)	3.4
Specific Gravity	No data.
Solubility In Water	0.4%
% Volatile by weight	100%
Evaporation Rate	(ether = 1): >1
Freezing point	No Data °C / No Data °F
Specific Gravity	No Data.
pH (concentrate)	No Data.

Fire & Explosion Hazard Data

Flash Point (Method): Not flammable per Tag closed cup test.
Flammable Limits in air: LEL/UEL Range: .4.3 – 13.5% (by Volume in air)

Extinguishing Media: Dry chemical extinguisher, water spray, water fog, CO2

Special Fire Fighting Procedures: Evacuate personnel. Wear self contained breathing apparatus (SCBA) and full protective equipment. Containers generate pressure when heated causing violent bursting and dangerous propelling of container. May form toxic decomposition Products above 480° F / 250° C.

Fire and Explosion hazards: No Data.

Hazardous Products of Combustion: No Data.

Autoignition Temp: No Data °C / No Data °F

Reactivity Data

Stability:	Stable
Conditions/Materials to Avoid:	No Data.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	Alkali or alkaline earth metals powdered Al, Zn, Be, Na, Mg, etc. Incompatible with strong bases such as NaOH, KOH, etc.
Decomposition Products:	Decomposes with heat. High temperatures (open flame, glowing metal surfaces, etc.) can decompose forming hydrofluoric acid and possibly carbonyl fluoride. This material is incompatible with strong bases and can react to form salts of hydrofluoric acid and unsaturated compounds of unknown toxicity.

Health Hazard Data

Health Hazards (Acute):

Inhalation – Inhalation of high concentrations of vapor is harmful and may cause heart Irregularities, unconsciousness or death. Intentional misuse or deliberate inhalation may cause Death without warning.

Eye/Skin – Moderate irritation. Persons wearing contact lenses should wear chemical Protective safety glasses when exposed to this product. For repeated skin contact: dry/chapped Skin, risk of chronic dermatitis.

Ingestion – Harmful if swallowed. Irritating to the mouth, throat and stomach.

Chronic Exposure - No Data.

Carcinogenicity - None of the components present in this material are listed by IARC, NTP, OSHA as a carcinogen.

Medical Conditions Aggravated by Exposure - Preexisting disease of the heart, lungs, skin and eyes.

Emergency & First Aid Procedures

Eyes:	Immediately flush with water. Remove any contact lenses and continue flushing for 15 minutes, lifting eyelids occasionally until no evidence of the chemical remains. If irritation develops or persist call a physician.
Skin:	Wash promptly with soap and water. Remove contaminated clothing and shoes and replace with clean clothing.
Inhalation:	Remove to fresh air. Keep person calm. If breathing is difficult, give oxygen. Call a physician.
Ingestion:	Do not induce vomiting. Immediately give two glasses of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Precautions For Safe Handling & Use

Steps to be taken in case material is spilled or released:

Evacuate area, absorb spilled liquid with commercial, non-flammable absorbent i.e. sand, vermiculite. Remove unprotected personnel. Protected personnel should remove ignition sources and shut off fire sources. Provide ventilation. Shovel (spark proof) absorbent material into drums and close. Do not flush to sewer.

Waste disposal method: Reclaim by distillation or remove to a permitted waste disposal facility. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial and Local regulations.

Handling Procedures and Equipment: Avoid breathing vapors or mist. Use only with adequate ventilation. Avoid repeated or prolonged contact with eyes, skin or clothing. Wash thoroughly after handling.

Storage Requirements: Do not store in direct sunlight. Store in cool dry place, away from heat, sparks or flames which may generate toxic decomposition products. Vapors are heavy and may concentrate in low poorly ventilated areas. Keep away from children.

Exposure Controls / Personal Protection

Respiratory Protection: Use only with adequate ventilation. Keep container tightly closed. Use approved NIOSH self-contained or supplied air respirators for emergencies and in situations where air may be displaced by vapors.

Specific Engineering Controls (such as ventilation, enclosed process): No Data.

Mechanical (General): In low lying, confined or poorly ventilated areas where vapors tend to accumulate and displace air, use explosion proof fans and motors.

Protective Clothing: Where there is potential for skin contact, use appropriate impervious gloves, apron, pants and jacket.

Eye Protection: Use chemical protective safety glasses.

HMIS Classification:

Health:	1
Flammability:	0
Reactivity:	1
Personal Protection:	

Manufacturer's Statement: This information contained herein is believed to be correct as of issue date. Manufacturer shall not be liable for damages arising out of, or in connection with the information obtained herein. It is intended to assist in the normal, safe usage of product. No warranty of any kind is expressed or implied as to the accuracy, completeness or adequacy of the information obtained herein.

Transportation: For Land DOT Proper Shipping Name is Consumer Commodity ORM-D and for Air ICAO Proper Shipping Name is Aerosols Non-Flammable NOS Hazard label: Non-flammable gas, Pkg Instr.203, hazard class 2.2