



BIOCIDE

This MSDS complies with the style format specified by ANSI Z400 1-1993

SECTION 1: CHEMICAL PRODUCT - COMPANY IDENTIFICATION

TETRA Technologies, Inc. (281) 367-1983
 25025 I-45 North (800) 327-7817
 The Woodlands, Texas 77380

(800) 424-9300 CHEMTREC (24-Hour Emergency Response)
(800) 222-1222 POISON CONTROL

SUBSTANCE: Biocide
EPA REGISTRATION NO.: 10352-14-34371-LA-1
CHEMICAL FAMILY: Biocide
MSDS CREATION DATE: 19 MAR 02
MSDS REVISION DATE: 12 JUN 03

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	PERCENTAGE
Gluteraldehyde	111-30-8	25%
Proprietary	Proprietary	Proprietary

The composition information on this product is proprietary. This product or one of its components is/are hazardous as defined in 29 CFR 1910.1200. In the event of a medical emergency, spill or fire, compositional information will be revealed to a physician, nurse, or responding emergency personnel.

SECTION 3: HAZARDS IDENTIFICATION

NFPA RATINGS: (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0
EMERGENCY OVERVIEW: Clear liquid with irritation odor. Liquid or vapors may cause skin and eye irritation. High concentrations of vapor may cause irritation of the respiratory tract. Avoid breathing vapor or mist. Avoid contact with eyes and skin. Wash thoroughly after handling. Use only with adequate ventilation.

POTENTIAL HEALTH EFFECTS:

INHALATION: High concentrations of vapor may cause irritation.
SKIN CONTACT: May cause irritation, possibly severe, depending on concentration.
EYE CONTACT: May cause irritation, possibly severe, depending on concentration.
INGESTION: Moderately toxic. May cause headache, dizziness, nausea, diarrhea and general weakness.

CARCINOGEN STATUS:

OSHA: No **NTP:** No **IARC:** No

SECTION 4: FIRST AID MEASURES

INHALATION: Remove from exposure area to fresh air immediately. If breathing is difficult, oxygen should be administered by a professional. Get medical attention.
SKIN CONTACT: Remove contaminated clothing and shoes immediately. Wash thoroughly with soap and water. If irritation persists get medical attention.
EYE CONTACT: Flush eyes with large amounts of water. Get medical attention.
INGESTION: Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. Get medical attention immediately.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Non-flammable liquid.



BIOCIDE

This MSDS complies with the style format specified by ANSI Z400 1-1993

FIRE AND EXPLOSION HAZARD: Spilled material could be slippery. High temperatures could cause drums(s) to melt or rupture.

EXTINGUISHING MEDIA: Determined by surrounding material. Water fog or spray, Dry Powder, Carbon Dioxide.

FIREFIGHTING: Move container(s) from fire area if you can do so without risk. Dike fire-control water for later disposal. Use agents suitable for type of surrounding fire. Avoid breathing vapors, keep upwind.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include oxides of carbon.

FIREFIGHTING EQUIPMENT: Those exposed to combustion products should wear self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Absorb with inert material and dispose of in accordance with applicable regulations.

SECTION 7: HANDLING AND STORAGE

Observe all federal, state, and local regulations when storing this liquid. Store in a cool, dry area. Store away from caustic or alkaline materials. Store away from oxidizers or materials bearing a yellow "DOT" label.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS

HAZARDOUS COMPONENT	OSHA TWA	ACGIH TWA	ACGIH STEL
Gluteraldehyde	1 mg/m3 (PEL)	1 mg/m3	3 mg/m3

VENTILATION: Provide natural or local exhaust ventilation system.

EYE PROTECTION: Wear safety glasses with splash shields or safety goggles/shield.

EMERGENCY WASH FACILITIES: Where there is possibility of exposure, the employer should provide an eye wash fountain and a safety shower within the immediate work area for emergency use.

CLOTHING: Wear appropriate protective clothing and equipment.

GLOVES: Wear appropriate impervious gloves.

RESPIRATOR: Use a NOSH/MSHA approved vapor respirator when exposure limits are unknown or exceed the permissible limits listed above. Consult the respirator manufacturer to determine appropriate type of equipment for a given application.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH

CONDITIONS: Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

DESCRIPTION: Clear liquid with irritating odor

SPECIFIC GRAVITY: 1.00-1.01

BOILING POINT: 212°F

FREEZING POINT: 32°F

VAPOR PRESSURE: Similar to water

VAPOR DENSITY: (Air = 1) >1

PH: 3.1-4.5

WATER SOLUBILITY: Soluble

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Stable under normal temperatures and pressures.



BIOCIDE

This MSDS complies with the style format specified by ANSI Z400 1-1993

CONDITIONS TO AVOID: Excessive heat.

INCOMPATIBILITIES: Oxidizers or oxidizing materials. Alkaline materials.

HAZARDOUS DECOMPOSITION: Decomposition products may include oxides of carbon.

POLYMERIZATION: Hazardous polymerization will not occur under normal temperatures and pressures.

SECTION 11: TOXICOLOGICAL INFORMATION

No data available.

SECTION 12: ECOLOGICAL INFORMATION

No data available.

SECTION 13: DISPOSAL INFORMATION:

Observe all federal, state and local regulations when disposing of this hazardous waste.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name-ID Number: Non-regulated.

SECTION 15: REGULATORY INFORMATION

TSCA STATUS:	Yes
CERCLA SECTION 103:	No
SARA SECTION 302:	No
SARA SECTION 304:	No
SARA SECTION 313:	No
SARA HAZARD CATEGORIES, SARA SECTIONS 311/312	
ACUTE HAZARD:	Yes
CHRONIC HAZARD:	Yes

SECTION 16: OTHER INFORMATION

Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.

This information relates to the specific product designated and may not be valid for such product used in combination with any other materials or in any other processes. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability, or completeness. It is the users' responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.

TETRA Technologies, Inc. reserves the right to refuse shipment of this product to any consumer who fails to demonstrate the ability to consistently handle and use it safely and in compliance with all applicable laws, rules and regulations. Such demonstration may require on-site inspection of any or all storage, processing, packaging and other handling systems that come in contact with it.

Customers are responsible for compliance with local, state and federal regulations that may be pertinent in the storage, application and disposal of this product.