

<b>Section 1. Chemical Product and Company Information</b>	
Common Name: 2% Buffered Glutaraldehyde Solution	Code: WP0021, 0270
Supplier: BBC Biochemical	MSDS#: WP0021, 0270
Synonym:	Validation Date: 3-2-09
Trade Name: Not available	Print Date: 3-2-09
Material Uses: Not available	Responsible Name: Dr. B
Manufacturer: BBC Biochemical PO Box 1320 409 Eleanor Lane Mount Vernon, WA 98273 1-800-635-4477	In Case of Emergency: 1-800-424-9300 Chemtrec USA 1-202-483-7616 Chemtrec Intrl 1-800-635-4477

<b>Section 2. Composition and Information on Ingredients</b>			
Name	CAS#	% by Weight	Exposure Limits
1) Glutaraldehyde	111-30-8	NOTE: Percent composition withheld as a trade secret.	Not available
2) Water	7732-18-5		Not available
3) Select Buffers	Not Available		Not available

<b>Section 3. Hazards Identification</b>	
Physical State and Appearance	Liquid, colorless to light yellow.
Emergency Overview	Not available.
Routes of Entry	Eye contact, inhalation, ingestion, skin contact.
Potential Acute Health Effects	
Eyes	Irritation may cause permanent damage.
Skin	Slightly hazardous in case of skin contact, irritant, may produce burns
Inhalation	Lung irritant, lung sensitizer.
Ingestion	May cause allergic reaction. Irritation to throat and respiratory system.
Potential Chronic Health Effects	
Medical Conditions Aggravated by Overexposure/Overexposure/Signs/Symptoms	May have carcinogenic effects. Mutagenic for mammalian somatic cells. (Glutaraldehyde)

<b>Section 4. First Aid Measures</b>	
Eye Contact	Check for and remove contacts. Immediately flush thoroughly with water for at least 15 minutes. Get medical attention.
Skin Contact	Wash thoroughly with water. Remove contaminated clothing at once (launder before reuse); discard contaminated shoes. Get medical attention.
Inhalation	Remove to fresh air; give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen.
Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as collar, tie, belt or waistband. Get medical attention immediately.
Notes to Physician	Not available.

<b>Section 5. Fire Fighting Measures</b>	
Flammability of the Product	Not available.
Auto-ignition Temperature	Not available.
Flash Points	None.
Flammable Limits	Not available.

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<b>Products of Combustion</b>	When heated to decomposition, it emits acrid smoke and fumes.
<b>Fire Hazards in Presence Of Various Substances</b>	Not available.
<b>Explosion Hazards in Presence of Various Substances</b>	Risk of explosion of the product in presence of mechanical impact. Risk of explosion of the product in the presence of static discharge.
<b>Fire Fighting Media and Instructions</b>	N/A
<b>Protective Clothing (Fire)</b>	
<b>Special Remarks on Fire Hazards</b>	
<b>Special Remarks on Explosion Hazards</b>	

### Section 6. Accidental Release Measures

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Poisonous Liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements, or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7, Handling and Storage

<b>Handling /Precautions</b>	Keep Locked up. Do not ingest. Do not breathe gas/fumes/ vapor/ spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.
<b>Storage</b>	Light sensitive, refrigerate, store in light resistant containers. Keep containers tightly closed. Keep containers in a cool, well ventilated area.

### Section 8. Exposure Controls / Personal Protection

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Personal Protection</b>	
<b>Eyes</b>	Safety glasses with side shields must be worn at all times.
<b>Body</b>	Impervious protective clothing must be worn to prevent skin contact.
<b>Respiratory</b>	Vapor respirator.
<b>Hands</b>	Neoprene, nitrile or equivalent gloves.
<b>Feet</b>	Not available.
<b>Personal Protection in Case of a Large Spill</b>	Safety glasses with side shields, impervious protective clothing, respirator if necessary and neoprene, nitrile or equivalent gloves.
<b>Product Name</b>	<b>Exposure Limits</b>
1)	
2)	
3)	
<b>Consult Local authorities before acceptable exposure limits.</b>	

### Section 9. Physical and Chemical Properties

<b>Physical State and Appearance</b>	Liquid.	<b>Odor:</b>	Mild, like rotten apples.
<b>Molecular Weight</b>	Not applicable.	<b>Taste:</b>	Not available.
<b>Molecular Formula</b>	Not applicable.	<b>Color:</b>	Clear to light yellow.
<b>pH (1%/Water)</b>	Not applicable.		
<b>Boiling/Condensation Point</b>	101 Degrees Celsius. 213.8 F.		
<b>Melting/Freezing Point</b>	-6 C. 21.2 F		
<b>Critical Temperature</b>	Not applicable.		
<b>Specific Gravity</b>	Not applicable.		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not applicable.		
<b>Volatility</b>	Not applicable.		
<b>Odor Threshold</b>	.04ppm		

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Evaporation Rate	Not applicable.
VOC	Not available.
Viscosity	Not available.
Ionicity (in water)	Not available.
Dispersion Properties	See solubility in water, diethyl ether.
Solubility	Easily soluble in cold water. Soluble in diethyl ether. Soluble in benzene, ethanol and other organic solvents.
Physical Chemical Comments	Not available.

### Section 10. Stability and Reactivity

Stability and Reactivity	Stable.
Conditions of Instability	Avoid contact with ignition sources.
Incompatibility with Various Substances	Reactive with oxidizing agents, alkalis.
Hazardous Decomposition Products	N/A
Hazardous Polymerization	Not available.

### Section 11. Toxicological Information

Toxicity to Animals	For a 50% Glutaraldehyde Solution: BASIS OF 4 HOUR EXPOSURE: Acute Oral Toxicity (LD50): 100mg/kg (Mouse) Acute dermal toxicity (LD50): . 2500mg/kg (Rat) Acute toxicity of the vapor (LC50): 480mg/m3 4 hours (Rat)
Chronic Effects on Humans	Carcinogenic effects. Mutagenic effects. Developmental effects.
Other Toxic Effects on Humans	Hazardous in case of skin contact, (irritant) of ingestions, of inhalation (lung irritant, lung sensitizer). Slightly hazardous in case of skin contact (sensitizer, permeator).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

### Section 12. Ecological Information

Ecotoxicity	Not available.
BODS and COD	Not available.
Biodegradable/OEDC	Not available.
Mobility	Not available.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on The Products of Biodegradation	Not available.

### Section 13. Disposal Considerations

Waste Information	Waste must be disposed according to federal, state and local environmental control regulations.
Waste Stream	Not available.
Consult your local or regional authorities.	

### Section 14. Transport Information

DOT Classification	Not hazardous.
Marine Pollutant	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not applicable.
TDG Classification	Not controlled under TDG (Canada).

## 2% Buffered Glutaraldehyde Solution

<b>ADR/RID Classification</b>	Not controlled under ADR (Europe).
<b>IMO/IMDG Classification</b>	Not controlled under IMDG.
<b>ICAO/IATA Classification</b>	Not controlled under IATA.

<b>Section 15. Other Information</b>			
<b>Label requirements</b>			
<b>Hazardous Material Information System (U.S.A.)</b>	<b>Health</b>	1	<b>National Fire Protection Association (U.S.A.)</b>
	<b>Fire Hazard</b>	0	
	<b>Reactivity</b>	0	
	<b>Personal Protection</b>		
<b>References</b>			
<b>Other Special Considerations</b>			
<b>Notice to Reader</b>			
<p><i>To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.</i></p>			