

BBC Biochemical

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Common Name: Cyto•Fluid Fix™	Code: 2200
Supplier: BBC Biochemical	MSDS#: 2200
Synonym: None.	Validation Date: 4-23-09
Trade Name: Cyto•Fluid Fix™	Print Date: 4-23-09
Material Uses: Fixing body fluids.	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

Section 2. Composition and Information on Ingredients

Name	CAS#	OSHA PEL/TWA	OSHA PEL/STEL
1) Ethyl Alcohol	64-17-5	1000 ppm	
2) Methyl Alcohol	67-56-1	200 ppm	250 ppm
3) Isopropyl Alcohol	67-63-0	400 ppm	500 ppm
4) Water	N/A	N/A	N/A
5) Selected Glycols	N/A	N/A	N/A

Section 3. Hazards Identification

Physical State and Appearance	Clear, colorless liquid with vinous odor.
Emergency Overview	Not available.
Routes of Entry	Eye contact, inhalation, ingestion, skin contact.
Potential Acute Health Effects	
Eyes	Severe eye irritant.
Skin	Prolonged contact causes irritation.
Inhalation	Chronic overexposure can cause damage to gastrointestinal tract, liver, kidneys, and cardiovascular system.
Ingestion	If swallowed in quantity, can be fatal or cause blindness. Causes headache, nausea, dizziness, narcosis.
Potential Chronic Health Effects	
Medical Conditions Aggravated by Overexposure/Overexposure/Signs/Symptoms	Kidney, liver, heart and GI conditions.

Section 4. First Aid Measures

Eye Contact	Immediately flush thoroughly with water for at least 15 minutes.
Skin Contact	Wash thoroughly with water.
Inhalation	Remove to fresh air; give artificial respiration if breathing has stopped.
Ingestion	If conscious, drink as directed by medical personnel. Never give anything by mouth to an unconscious person. Only induce vomiting if directed by medical personnel.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable.
Auto-ignition Temperature	Not available.
Flash Points	About 55°F.
Flammable Limits	LEL (%) 3.3 UEL (%) 19.0

Products of Combustion	Not available.
Fire Hazards in Presence Of Various Substances	Not available.
Explosion Hazards in Presence of Various Substances	Not available.
Fire Fighting Media and Instructions	Dry chemical, Carbon Dioxide, "Alcohol" foam. Use water spray to cool fire-exposed containers and disperse vapors.
Protective Clothing (Fire)	Wear self-contained breathing apparatus and protective clothing.
Special Remarks on Fire Hazards	Vapor can travel distances to ignition source and flash back.
Special Remarks on Explosion Hazards	

Section 6. Accidental Release Measures

Small Spill and Leak	Evacuate area of all unnecessary personnel. Provide ventilation. Contain spill (dilution with water will raise the flash point). Wear suitable protective equipment against inhalation and liquid contact. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards.
Large Spill and Leak	Same as above.

Section 7, Handling and Storage

Handling	Do not breathe vapors. Do not get in eyes. Avoid skin contact. Wash thoroughly after handling. Do not take internally. Have eye wash and safety equipment readily available.
Storage	Keep container closed. Store in cool area away from ignition sources and oxidizers.

Section 8. Exposure Controls / Personal Protection

Engineering Controls	Local exhaust preferred. Eye wash and safety shower.
Personal Protection	
Eyes	Chemical safety goggles.
Body	Protective clothing to minimize skin contact.
Respiratory	Air-supplied mask in confined areas. Use only NIOSH or MSHA approved equipment.
Hands	Neoprene, Nitrile, or equivalent.
Feet	Impervious footwear to minimize skin contact.
Personal Protection in Case of a Large Spill	Chemical safety goggles, impervious clothing and footwear, air-supplied mask, Neoprene or Nitrile gloves.
Product Name	Exposure Limits
1) Ethanol	OSHA PEL 1000ppm TWA
2) Methanol	OSHA PEL 200ppm TWA
3) Isopropanol	OSHA PEL 400ppm TWA
Consult Local authorities before acceptable exposure limits.	

Section 9. Physical and Chemical Properties

Physical State and Appearance	Clear, colorless liquid with vinous odor.	Odor:	Vinous.
Molecular Weight	Not applicable.	Taste:	Not available.
Molecular Formula	Not applicable.	Color:	Colorless.
pH (1%/Water)	Not applicable.		
Boiling/Condensation Point	79.4°C (C 760 mmHg).		
Melting/Freezing Point	Not applicable.		
Critical Temperature	Not applicable.		
Specific Gravity	0.81 (H ₂ O=1).		
Vapor Pressure	19°C (mmHg=40).		
Vapor Density	1.59 (Air=1).		
Volatility	100%.		
Odor Threshold	Not applicable.		
Evaporation Rate	1.4 (BuOAc=1).		
VOC	Not available.		
Viscosity	Not available.		
Ionicity (in water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Miscible in water.		
Physical Chemical	Not available.		

Comments

Section 10. Stability and Reactivity

Stability and Reactivity	Stable.
Conditions of Instability	Heat, sparks, open flame.
Incompatibility with Various Substances	Oxidizers, concentrated nitric and sulfuric acids, aldehydes, halogens.
Hazardous Decomposition Products	CO _x .
Hazardous Polymerization	Does not occur.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.						
Chronic Effects on Humans							
Other Toxic Effects on Humans	This product contains the following toxic chemical subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:						
	<table border="1"> <thead> <tr> <th>CAS #</th> <th>Chemical Name</th> <th>DeMinimis/SARA 313%</th> </tr> </thead> <tbody> <tr> <td>67-56-1</td> <td>Methanol</td> <td>1.0</td> </tr> </tbody> </table>	CAS #	Chemical Name	DeMinimis/SARA 313%	67-56-1	Methanol	1.0
CAS #	Chemical Name	DeMinimis/SARA 313%					
67-56-1	Methanol	1.0					
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

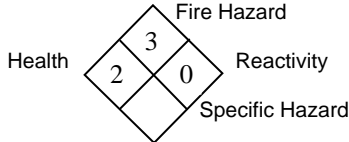
Waste Information	Not available.
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	Flammable, Ethanol, UN1170, 3, II
Marine Pollutant	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not applicable.
TDG Classification	Flammable, Ethanol, UN1170, 3, II
ADR/RID Classification	ADR (Europe) Information not available.
IMO/IMDG Classification	IMDG Information not available.
ICAO/IATA Classification	See IATA Regulations, Flammable, Ethanol, UN1170, 3, II

Section 15. Other Information

Label requirements

Hazardous Material Information System (U.S.A.)	Health	2	National Fire Protection Association (U.S.A.)	
	Fire Hazard	3		
	Reactivity	0		
	Personal Protection			

References

Other Special Considerations

Notice to Reader

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.