

BBC Biochemical

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Common Name:	B-Plus Fixative™	Code:	1740, 1750, 1751
Supplier:	BBC Biochemical 8510 Cedarhome Dr. Stanwood, WA 98292	MSDS#:	1700
Synonym:	B-Plus Fixative™	Validation Date:	6/1/02
Trade Name:	Not Available	Print Date:	6/1/02
Material Uses:	Not Available	Responsible Name:	Dr. B
Manufacturer:	BBC Biochemical 8510 Cedarhome Dr. Stanwood, WA 98292 1-800-635-4477	In Case of Emergency: 1-800-424-9300 Chemtrec USA 1-202-483-7616 Chemtrec Intrl 1-800-225-8867	

Section 2. Composition and Information on Ingredients

Name	CAS#	% by Weight	Exposure Limits
1) Water	7732-18-5		Not Available
2) Formaldehyde 37%	50-00-0	3.7%	Not Available
3) Zinc Chloride	7946-85-7	>0.5% - <1%	Not Available
4) Selected Buffers	Not Available	Not Available	Not Available

Section 3. Hazards Identification

Physical State and Appearance	Liquid, Clear, Blue
Emergency Overview	Irritation to mucous membranes, skin, eyes. Ingestion may cause stomach cramps and nausea. Eyes may sting, burning sensation.
Routes of Entry	Eye contact, inhalation, ingestion, skin contact.
Potential Acute Health Effects	
Eyes	Irritation, may cause permanent damage.
Skin	Irritation.
Inhalation	Irritation to nose, throat and respiratory system.
Ingestion	May cause allergic reaction. Irritation to throat and respiratory system.
Potential Chronic Health Effects	Formaldehyde has the potential to cause cancer in humans. Repeated and prolonged exposure increases the risk. In humans, formaldehyde exposure has been associated with cancers of the lungs, nasopharynx and oropharynx, and nasal passages.
Medical Conditions Aggravated by Overexposure	Respiratory conditions.
Overexposure/Signs/Symptoms	Not Available.

Section 4. First Aid Measures

Eye Contact	Immediately flush thoroughly with water for at least 15 minutes.
Skin Contact	Wash thoroughly with soap and water. Remove contaminated clothing at once, (launder before reuse); discard contaminated shoes.
Inhalation	Not available.
Ingestion	If conscious, dilute, inactivate, or absorb the ingested formaldehyde by giving milk, activated charcoal, or water. Get immediate medical attention.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Not available.
Auto-ignition Temperature	Not available.
Flash Points	None.
Flammable Limits	Not available.
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	CO ₂ , Foam, Water
Protective Clothing (Fire)	Wear self-contained breathing apparatus and protective clothing.
Special Remarks on Fire Hazards	Contact with HCl may cause formation of the potent carcinogen, bischloromethyl ether.
Special Remarks on Explosion Hazards	Thermal decomposition produces toxic fumes.

Section 6. Accidental Release Measures

Small Spill and Leak	Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under section 7. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Waste Disposal Method. Comply with Federal, State, and local regulations on reporting releases.
Large Spill and Leak	Same as above.

Section 7. Handling and Storage

Handling	Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded, a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety supplier). Engineering and/or administrative rules should be implemented to reduce exposure. Safety glasses must be worn at all times with side shields. Impervious protective clothing must be worn to prevent skin contact. Protective gloves: Neoprene, Nitrile or equivalent.
Storage	Keep container tightly closed. Store away from heat, sparks, or open flame.

Section 8. Exposure Controls / Personal Protection

Engineering Controls	Not Available.
Personal Protection	
Eyes	Safety glasses.
Body	Impervious clothing to prevent skin contact.
Respiratory	Advised at all times.
Hands	Neoprene, Nitrile or equivalent.
Feet	Not Available.
Personal Protection in Case of a Large Spill	Splash goggles, boots, gloves.
Product Name	Exposure Limits
1) Formaldehyde 37%	Not Available.
2) Zinc Chloride	Not Available.
3)	
Consult Local authorities before acceptable exposure limits.	

Section 9. Physical and Chemical Properties

Physical State and Appearance	Not applicable.	Odor:	Strong pungent.
Molecular Weight	Not applicable.	Taste:	Not available.
Molecular Formula	Not applicable.	Color:	Blue.
pH (1%/Water)	Not applicable.		
Boiling/Condensation Point	Not applicable.		
Melting/Freezing Point	Not applicable.		
Critical Temperature	Not applicable.		
Specific Gravity	Not applicable.		
Vapor Pressure	Not applicable.		
Vapor Density	Not applicable.		
Volatility	Not applicable.		
Odor Threshold	Not applicable.		
Evaporation Rate	Not applicable.		
VOC	Not available.		
Viscosity	Not available.		
Ionicity (in water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Miscible in Water		

Physical Chemical Comments	Not available.
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Section 10. Stability and Reactivity

Stability and Reactivity	Not available.
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Conditions of Instability	Not available.
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Incompatibility with Various Substances	Not available.
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Hazardous Decomposition Products	Not available.
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Hazardous Polymerization	Not available.
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Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
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Chronic Effects on Humans	
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Other Toxic Effects on Humans	
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Special Remarks on Toxicity to Animals	Tests on laboratory animals indicate formaldehyde may cause tumors and may produce adverse mutagenic and reproductive effects. Cited in Registry of Toxic Effects of Substances (RTECS).
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Special Remarks on Chronic Effects on Humans	Not available.
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Special Remarks on Other Toxic Effects on Humans	Not available.
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Special Remarks on Other Toxic Effects on Humans	Not available.
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Section 12. Ecological Information

Ecotoxicity	Not available.
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BODS and COD	Not available.
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Biodegradable/OEDC Mobility	Not available. Not available.
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Toxicity of the Products of Biodegradation	Not available.
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Special Remarks on The Products of Biodegradation	Not available.
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Section 13. Disposal Considerations

Waste Information	Incineration, fuels blending or recycle.
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Waste Stream	Not available.
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CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES.	
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Section 14. Transport Information

DOT Classification	
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Marine Pollutant	Not available.
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Hazardous Substances Reportable Quantity	Not available.
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Special Provisions for Transport	Not applicable.
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TDG Classification	Not controlled under TDG (Canada).
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ADR/RID Classification	Not controlled under ADR (Europe).
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IMO/IMDG Classification	Not controlled under IMDG.
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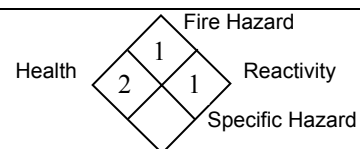
ICAO/IATA Classification	Not controlled under IATA.
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Section 15. Other Information

Label requirements

Hazardous Material
Information System
(U.S.A.)

Health	2
Fire Hazard	1
Reactivity	1
Personal Protection	

National Fire
Protection
Association
(U.S.A.)

References

Other Special
Considerations

Validated by Dr. B on 6/1/02.

Notice to Reader

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