

BBC Biochemical

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

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|---|---|
| Common Name: B-Plus Fixative™ | Code: 1740, 1750, 1751 |
| Supplier: BBC Biochemical | MSDS#: 1700 |
| Synonym: B-Plus Fixative™ | Validation Date: 04-13-12 |
| Trade Name: Not Available | Print Date: 04-13-12 |
| 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 |

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 | <25% | OSHA PEL 0.75ppm TWA |
| 3) Zinc Salts | Not Available | >0.5% - <1% | Not Available |
| 4) Selected Buffers | Not Available | Not Available | Not Available |

Section 3. Hazards Identification

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| 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

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| Eye Contact | Immediately flush thoroughly with water for at least 15 minutes. |
| Skin Contact | Wash thoroughly with 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

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| 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. |

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| 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

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| 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

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| 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

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| 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% | OSHA PEL 0.75ppm TWA |
| 2) Zinc Salts | Not Available. |
| 3) | |
| Consult Local authorities before acceptable exposure limits. | |

Section 9. Physical and Chemical Properties

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| Physical State and Appearance | Light blue liquid. | 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 | | |

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

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| Stability and Reactivity | Not available. |
| Conditions of Instability | Not available. |
| Incompatibility with Various Substances | Not available. |
| Hazardous Decomposition Products | Not available. |
| Hazardous Polymerization | Not available. |

Section 11. Toxicological Information

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| Toxicity to Animals | LD50: Not available. LC50: Not available. |
| Chronic Effects on Humans | |
| Other Toxic Effects on Humans | |
| 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). |
| Special Remarks on Chronic Effects on Humans | Not available. |
| Special Remarks on Other Toxic Effects on Humans | Not available. |

Section 12. Ecological Information

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| Ecotoxicity | Not available. |
| BOD5 and COD | Not available. |
| Biodegradable/OEDC Mobility | Not available. Not available. |
| Toxicity of the Products of Biodegradation | Not available. |
| Special Remarks on The Products of Biodegradation | Not available. |

Section 13. Disposal Considerations

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

Section 14. Transport Information

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| 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). |
| ADR/RID Classification | Not controlled under ADR (Europe). |
| IMO/IMDG Classification | Not controlled under IMDG. |
| ICAO/IATA Classification | Not controlled under IATA. |

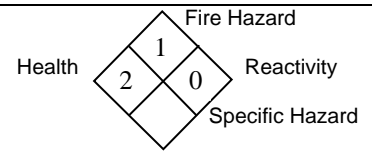
Section 15. Other Information

Label requirements

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

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|----------------------------|---|
| Health | 2 |
| Fire Hazard | 1 |
| Reactivity | 0 |
| Personal Protection | |

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



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.