

MATERIAL SAFETY DATA SHEET

BC1244

SECTION 1:

IDENTIFICATION

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| Company Name: | QUALICHEM TECHNOLOGIES |
| Address: | 885 Woodstock Rd, Ste 430-111 Roswell, GA 30075 |
| Phone No. | (800) 658-7716 |
| Fax No. | (877) 209-1556 |
| Emergency Phone No. | CHEM-TEL 800-255-3924 |
| Date Prepared: | 11/19/04 |
| Date Revised: | 4/29/09 |

SECTION 2:

INGREDIENTS

| <u>MATERIAL</u> | <u>CAS NO.</u> | <u>%</u> |
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| PHOSPHINOCARBOXYLIC ACID POLYMER | PROPRIETARY | 5 - 10 |
| SODIUM HYDROXIDE | 1310-73-2 | < 1 |
| SODIUM MOLYBDATE | 7631-95-0 | < 2 |

SECTION 3:

HEALTH HAZARDS

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| Ingestion: | MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY. |
| Inhalation: | NOT A LIKELY ROUTE OF EXPOSURE. INHALATION OF MIST MAY BE IRRITATING TO RESPIRATORY TRACT. |
| Skin Contact: | NOT AN IRRITANT |
| Eye Contact: | CAUSES IRRITATION. |
| Other Information: | OTHER THAN ACUTE EFFECTS LISTED ABOVE, NO LONG TERM EFFECTS KNOWN. |

SECTION 4:

FIRST AID

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| Ingestion: | DRINK SEVERAL GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION. |
| Inhalation: | REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. |
| Skin Contact: | WASH WITH PLAIN WATER OR SOAP AND WATER. |
| Eye Contact: | IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION IF IRRITATION PERSISTS. |
| Notes to Physician: | NO ANTIDOTES KNOWN. TREAT SYMPTOMS SUPPORTIVELY. |

SECTION 5:

FIRE AND EXPLOSION HAZARD DATA

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| Flash Point/Method: | NONE |
| Upper/Lower Limit in Air: | N.A./N.A. |
| Extinguishing Media: | WATER OR ANY MEDIA SUITABLE FOR THE SURROUNDING FIRE. |
| Procedures: | FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN CONFINED AREAS. |
| Unusual Hazards: | NONE |
| Combustion Products: | IF WATER IS EVAPORATED, OXIDES OF CARBON AND PHOSPHORUS MAY BE PRODUCED. |

SECTION 6:

ACCIDENTAL RELEASE MEASURES

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| Personal Precautions: | WEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8. |
| Environmental Precautions: | THIS PRODUCT HAS A LOW HAZARD POTENTIAL IF RELEASED INTO THE ENVIRONMENT ACCIDENTLY. |
| Procedures for Clean Up: | SMALL SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER, PREFERABLY TO A SANITARY SEWER. LARGER SPILLS MAY BE DIKED TO MINIMIZE RUN-OFF AND NEUTRALIZED WITH DILUTE ACID. LIQUID MAY BE ABSORBED IN SAWDUST OR ANY AVAILABLE ABSORBANT AND SWEEPINGS DISPOSED OF IN A LANDFILL. OBEY ALL FEDERAL, STATE OR LOCAL |

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| | REGULATIONS. |
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SECTION 7: HANDLING AND STORAGE

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| Handling: | NORMAL INDUSTRIAL HANDLING PRACTICES. |
| Storage: | KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL, DRY PLACE. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Precautionary Measures: | STANDARD INDUSTRIAL HANDLING PRECAUTIONS. WASH THOROUGHLY AFTER HANDLING CHEMICALS. |
| Engineering Controls: | USE WITH ADEQUATE VENTILATION TO KEEP EXPOSURES BELOW OCCUPATIONAL EXPOSURE LIMITS. |
| Control Limits: | SODIUM HYDROXIDE: OSHA PEL: 2 mg/m ³ Ceiling; ACGIH TLV: 2 mg/m ³ Ceiling. SODIUM MOLYBDATE - OSHA PEL: 5 mg/m ³ FOR SOLUBLE MOLBYDENUM COMPOUNDS AS Mo. |
| Equipment for Personal Protection: | SAFETY GLASSES WITH SIDE SHIELDS AND IMPERMEABLE GLOVES SHOULD BE WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION AND SAFETY SHOWER IN AREA OF USE. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | CLEAR LIQUID |
| Odor: | CHARACTERISTIC |
| pH (undiluted): | 8-10 |
| Specific Gravity: | 1.04 -1.06 |
| Density: | 8.8 lbs./gal. |
| Solubility in Water: | COMPLETE |
| Boiling Point: | 212°F |
| Percent Volatile: | >60 (WATER) |
| Vapor Pressure (mmHg): | N.D. |
| Vapor Density: | N.D. |
| Evaporation Rate: | (water=1): ~1 |

SECTION 10: STABILITY AND REACTIVITY

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| Stability: | STABLE |
| Conditions to Avoid: | NONE |
| Hazardous Polymerization: | STABLE |
| Conditions to Avoid: | NONE |
| Incompatibility: | MAY REACT WITH STRONG OXIDIZING AGENTS OR ACIDS. |
| Hazardous Decomposition Products: | IF WATER EVAPORATED, OXIDES OF CARBON AND PHOSPHORUS COULD BE PRODUCED BY COMBUSTION. |

SECTION 11: TOXICOLOGICAL INFORMATION

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| Material & Tests: | NAOH: IRRITATION DATA; SKIN (RABBIT) = 500 mg/24 H (SEVERE); EYE (RABBIT) = 50 ug/24H (SEVERE). PHOSPHINOCARBOXYLIC ACID POLYMER: ORAL LD50 (RAT) = >5,000 mg/kg; SKIN AND EYE IRRITATION (RABBIT) = NON-IRRITANT. SODIUM MOLYBDATE: ORAL LD50 (RAT) 4000 mg/kg, INHALATION LC50 (RAT) >2080 mg/m3/4 Hr. |
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SECTION 12: ECOLOGICAL INFORMATION

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| Aquatic Toxicity: | SODIUM HYDROXIDE: 48 HR LC50 BLUEGILL SUNFISH = 99 mg/l; 96 HR LC50 MOSQUITO FISH = 125 mg/l; 48 HR LC50 BROWN SHRIMP = 30 - 100 mg/l. PHOSPHINOCARBOXYLIC ACID POLYMER (DATA FOR A SIMILAR PRODUCT): RAINBOW TROUT: 96 HR LC50>1000 ppm (SOLIDS); ZEBRA FISH: 96 HR. LC50>1000 ppm (SOLIDS); BROWN SHRIMP: 96 HR LC50>10,000 ppm; DAPHNIA MAGNA: 24 HR EC50>320 ppm. SODIUM MOLYBDATE: 96 HR LC50 (STRIPED |
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| | BASS) >79.8 mg/l; 96 WEEK EC50(AMPHIPOD) =2,650 mg/l. |
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SECTION 13: DISPOSAL CONSIDERATIONS

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| General Considerations: Procedures: | THIS PRODUCT WOULD NOT BE CONSIDERED A HAZARDOUS WASTE. DISPOSAL BY USE PREFERRED BUT IF THIS NOT POSSIBLE, DILUTE WITH COPIOUS QUANTITIES OF WATER AND FLUSH TO WASTE, PREFERABLY TO A SANITARY SEWER. OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS. |
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SECTION 14: TRANSPORT INFORMATION

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| Shipping Name: | COMPOUNDS, WATER TREATMENT, N.O.S. (NOT REGULATED BY US DOT) |
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SECTION 15: REGULATORY INFORMATION

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| <u>Regulation</u> | <u>Material</u> | <u>RQ</u> | <u>Max. %</u> |
| CERCLA (40 CFR302.4): | SODIUM HYDROXIDE | 1000 lbs. | 1.0 |
| SARA 302 (Sect. 355, Appendix A): | <u>Material</u> | <u>TPQ</u> | <u>Max. %</u> |
| | NONE | | |
| SARA 311/312: | <u>Categories</u> | <u>Hazards</u> | |
| | IMMEDIATE HEALTH | EYE IRRITANT | |
| SARA 313 (40 CFR 372.45): | <u>Material</u> | <u>Max. %</u> | |
| | NONE | | |
| CWA (40 CFR 401.15): | NONE | | |
| RCRA (40 CFR 261): | NONE | | |
| OSHA (29 CFR 1910.1200): | ALL COMPONENTS LISTED UNDER THIS STANDARD ARE SHOWN IN SECTION 2 OF THIS MSDS. | | |
| TSCA: | ALL INGREDIENTS IN THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY. | | |

SPECIAL STATE REGULATIONS

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|--------------|-------------------|----------|-------------------------------|
| <u>STATE</u> | <u>INGREDIENT</u> | <u>%</u> | <u>REGULATORY DESIGNATION</u> |
| NONE | | | |

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

| | | |
|--------------|---------------------|--------------|
| <u>NFPA*</u> | <u>HAZARD</u> | <u>HMIS*</u> |
| 1 | HEALTH (Blue) | 1 |
| 0 | FIRE (Red) | 0 |
| 0 | REACTIVITY (Yellow) | 0 |
| | PERSONAL PROTECTION | B |
| | SPECIAL HAZARDS | |

*Notes: 0 = Insignificant; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme

The data contained in this Material Safety Data Sheet has been prepared based upon an evaluation of the ingredients in the product, their concentration in the product and potential interactions. The information is offered in good faith and is believed to be accurate. It is furnished to the customer who is urged to study it carefully to become aware of hazards, if any, in the storage, handling, use and disposal of the product; and to insure his employees are properly informed and advised of all safety precautions required. The information is furnished for compliance with the "Occupational Safety and Health Act" of 1970, the "Hazards Communication Act" of 1983 as well as various other Federal, State and Local regulations. Use or dissemination of all or part of this information for any other purpose is prohibited by law.