SECTION 1: IDENTIFICATION

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: 1/14/05 Date Revised: 5/13/09

SECTION 2: INGREDIENTS

MATERIAL CAS NO. PHOSPHONOCARBOXYLIC ACID, POTASSIUM SALT **PROPRIETARY** HYDROXYPHOSPHONOACETIC ACID, POTASSIUM SALT 1 - 5129836-12-0 POTASSIUM PHOSPHATE 7778-53-2 1 - 5SODIUM TOLYTRIAZOLE 64665-57-2 < 2 POTASSIUM HYDROXIDE 1310-58-3 < 1

SECTION 3: HEALTH HAZARDS

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

Ingestion: DRINK SEVERAL GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING.

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET

Inhalation: | MEDICAL ATTENTION.

REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS

Skin Contact: | PERSIST.

Eye Contact: WASH WITH PLAIN WATER OR SOAP AND WATER.

IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL

Notes to Physician: ATTENTION IF IRRITATION PERSISTS.

NO ANTIDOTES KNOWN. TREAT SYMPTOMS SUPPORTIVELY.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

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

Personal Precautions:
Environmental Precautions:

Procedures for Clean Up:

Procedures for Clean Up:

Procedures for Clean Up:

MEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8.

THIS PRODUCT HAS A LOW HAZARD POTENTIAL IF RELEASED INTO THE ENVIRONMENT ACCIDENTLY.

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 REGULATIONS.

SECTION 7: HANDLING AND STORAGE

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

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: | POTASSIUM HYDROXIDE: OSHA PEL: 2 mg/m3 Ceiling; ACGIH TLV: 2 mg/m3

Ceiling.

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

Appearance: AMBER LIQUID
Odor: CHARACTERISTIC

pH (undiluted): <12.5
Specific Gravity: 1.03 - 1.05
Density: 8.65 lbs./gal.
Solubility in Water: Boiling Point: 212°F

Percent Volatile: >75 (WATER)

Vapor Pressure (mmHg): N.D. Vapor Density: N.D.

Evaporation Rate: (water=1): ~1

SECTION 10: STABILITY AND REACTIVITY

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

Material & Tests:	POTASSIUM HYDROXIDE: ORAL LD50 (RAT) >273 mg/kg; PHOSPHONO-
	CARBOXYLIC ACID, SODIUM SALT: ORAL LD50 (RAT) >5g/kg, DERMAL LD50
	(RABBIT) >2g/kg; HYDROXYPHOSPHONO-ACETIC ACID, POTASSIUM SALT: ORAL
	LD50 (RAT) 2750 mg/kg; SODIUM TOLYLTRIAZOLE: ORAL LD50 (MALE RATS) 920
	mg/kg, (FEMALE RATS) 640 mg/kg.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:

POTASSIUM HYDROXIDE: 96 HR LC50 FATHEAD MINNOW = 179 mg/l; 48 HR EC50 WATER FLEA = 60 mg/l; 96 HR EC50 GREEN ALGAE = 61 mg/l. PHOSPHONO-CARBOXYLIC ACID, SODIUM SALT: LC50(96 hr.) BLUEGILL > 1,000 ppm; LC50 (96 hr) RAINBOW TROUT = 1200 ppm; EC50 (48 hr) DAPHNIA MAGNA = 1800 ppm. HYDROXYPHOSPHONOACETIC ACID: RAINBOW TROUT (96 Hr LC50) 180 ppm, DAPHNIA MAGNA (48 Hr EC50) >140 ppm; SODIUM TOLYLTRIAZOLE: RAINBOW TROUT (96 Hr LC50) 23.7 ppm, BLUEGILL SUNFISH (96 Hr LC50) 191.2 ppm, DAPHNIA MAGNA (48 Hr EC50) 245 ppm.

SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations:	THIS PRODUCT WOULD NOT BE CONSIDERED A HAZARDOUS WASTE.
Procedures:	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.

SECTION 14: TRANSPORT INFORMATION

Shipping Name: COMPOUNDS, WATER TREATMENT, N.O.S. (NOT REGULATED BY US DOT)

SECTION 15: REGULATORY INFORMATION

Regulation CERCLA (40 CFR302.4):	<u>Material</u> POTASSIUM HYDROXIDE	<u>RQ</u> 1000 lbs.	<u>Max. %</u> 1	
SARA 302 (Sect. 355, Appendix A):	<u>Material</u> NONE	<u>TPQ</u>	<u>Max. %</u>	
SARA 311/312:	<u>Categories</u> IMMEDIATE HEALTH		<u>azards</u> IRRITANT	
SARA 313 (40 CFR 372.45):	Material NONE		<u>Max. %</u>	
CWA (40 CFR 401.15):	NONE			
RCRA (40 CFR 261):	NONE			
OSHA (29 CFR 1910.1200): TSCA:	ALL COMPONENTS LISTED UNDER THIS STANDARD ARE SHOWN IN SECTION 2 OF THIS MSDS. ALL INGREDIENTS IN THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY.			

SPECIAL STATE REGULATIONS

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

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

NFPA*	HAZARD	HMIS*
2	HEALTH (Blue)	2
0	FIRE (Red)	0
0	REACTIVITY (Yellow)	0
	PERSONAL PROTECTION	В
	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.