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: 2/23/07 Date Revised: 5/13/09

SECTION 2: INGREDIENTS

MATERIAL CAS NO. POLYACRYLATE TERPOLYMER, SODIUM SALT PROPRIETARY 2-PHOSPHONOBUTANE-1, 2,4-TRICARBOXYLIC ACID, POTASSIUM SALT 3858-78-7 1 - 5SODIUM TOLYTRIAZOLE 64665-57-2 1 - 5POTASSIUM PHOSPHATE 7778-53-2 < 3 POTASSIUM POLYPHOSPHATE 7320-34-5 < 3 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

IF WATER EVAPORATED. OXIDES OF CARBON AND PHOSPHORUS COULD BE

AND SAFETY SHOWER IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: CLEAR LIQUID
Odor: CHARACTERISTIC

pH (undiluted): 11.5 – 12.4
Specific Gravity: 1.05 – 1.07
Density: 8.9 lbs./gal.
Solubility in Water: COMPLETE

Boiling Point: 212°F

Percent Volatile: >70 (
Vapor Pressure (mmHg): N.D.

Vapor Density: N.D.

Evaporation Rate: (water=1): ~1

SECTION 10: STABILITY AND REACTIVITY

>70 (WATER)

Stability: STABLE
Conditions to Avoid: NONE
Hazardous Polymerization: STABLE
Conditions to Avoid: NONE

Products:

Incompatibility: MAY REACT WITH STRONG OXIDIZING AGENTS OR ACIDS.

Hazardous Decomposition

PRODUCED BY COMBUSTION.

SECTION 11:	TOXICOLOGICAL INFORMATION
Material & Tests:	2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID: ORAL LD50 (MOUSE) 1800 mg/kg. POLYACRYLATE TERPOLYMER: ORAL LD50 (RAT) >5000 mg/kg, DERMAL LD50 (RABBIT) >2000 mg/kg. POTASSIUM POLYPHOSPHATE: ACUTE ORAL LD50 (RAT) >1,000 mg/kg; ACUTE DERMAL LD50 (RABBIT) >4640 mg/kg. TOLYLTRIA-ZOLE: ORAL LD50 (MALE RATS) 920 mg/kg, (FEMALE RATS) 640 mg/kg. POTASSIUM HYDROXIDE: ORAL LD50 (RAT) >273 mg/kg.

Aquatic Toxicity: Aquatic Toxicity: 2-PHOSPHONOBUTANE-1,2,4-TRICARBOXYLIC ACID: RAINBOW TROUT (96 Hr LC50) 5300 mg/l, DAPHNIA MAGNA (48 Hr LC50) 300 mg/l. TERPOLYMER: RAINBOW TROUT (96 Hr lc50) 1200 ppm; BLUEGILL SUNFISH (96 Hr LC50) >2000 ppm; DAPHNIA MAGNA (48 Hr LC50) 3600 ppm. POTASSIUM POLYPHOSPHATE: ORAL LD50 (RAT) = 2980 mg/kg; DERMAL LD50 (RABBIT) = 7940 mg/kg. 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. 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.

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):	Material 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> E IRRITANT	
SARA 313 (40 CFR 372.45):	<u>Material</u> NONE		<u>Max. %</u>	
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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CTATE	INGREDIENT	0/	REGULATORY DESIGNATION	
SIAIE	INGREDIENT	%	REGULATORY DESIGNATION	

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NONE		
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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.