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: 12/12/08
Date Revised: 4/30/09

SECTION 2: INGREDIENTS

CAS NO. **MATERIAL** SODIUM SULFITE 7757-83-7 10 - 15 POTASSIUM HYDROXIDE 1310-58-3 < 10 SODIUM HYDROXIDE 1310-73-2 < 5 PHOSPHINOCARBOYXYLIC ACID POLYMER PROPRIETARY < 5 DIETHYLAMINOETHANOL 100-37-8 1 - 5 SODIUM LIGNOSULFONATE < 1

SECTION 3: HEALTH HAZARDS

Ingestion: MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY. DUE TO

HIGH ALKALINITY, CAUSES SEVERE IRRITATION, POSSIBLE BURNS OF INTERNAL

TISSUES.

Inhalation: NOT A LIKELY ROUTE OF EXPOSURE. INHALATION OF MIST IRRITATING TO

RESPIRATORY TRACT.

Skin Contact: PROLONGED CONTACT CAUSES SEVERE IRRITATION.

Eye Contact: CAUSES SEVERE IRRITATION, POSSIBLE BURNS AND EYE DAMAGE.

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

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.

Notes to Physician: | THIS PRODUCT IS A STRONG, CAUSTIC ALKALINE PRODUCT. TREAT SYMPTOMS

WITH SUPPORTIVE MEASURES.

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. FIRE-FIGHTERS

Procedures: SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED

BREATHING APPARATUS SHOULD BE USED INCONFINED 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: WEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8. Environmental Precautions: THIS PRODUCT HAS A MODERATE 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

REGULATIONS.

Prohibited Materials: NONE

SECTION 7: HANDLING AND STORAGE

Handling: THIS PRODUCT IS A STRONG ALKALINE MATERIAL AND THE WEARING OF

INDICATED PROTECTIVE EQUIPMENT IS REQUIRED WHEN HANDLING THE

UNDILUTED MATERIAL.

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

POTASSIUM HYDROXIDE: OSHA PEL - 2 mg/m³ (Ceiling); ACGIH TLV - 2 mg/m³

(Ceiling). DIETHYLAMINOETHANOL: OSHA (PEL) = 10 ppm (TWA); ACGIH (TLV) = 10

ppm (TWA)

Equipment for Personal

Protection:

SAFETY GLASSES WITH SIDE SHIELDS, GOGGLES, OR FACESHIELD,

IMPERMEABLE GLOVES, AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION IN AREA OF

USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: | BROWN LIQUID

Odor: | PRACTICALLY NONE

pH (undiluted): >13
Specific Gravity: 1.20-1.22
Density: 10.1 lbs./gal.
Solubility in Water: COMPLETE

Solubility in Water: COMPLETE
Boiling Point: >212°F
Percent Volatile: >70 (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

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, NITROGEN, AND PHOSPHORUS

COULD BE PRODUCED BY COMBUSTION.

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Material & Tests:	SODIUM SULFITE: ORAL LD50 (MOUSE) = 820 mg/kg. SODIUM HYDROXIDE:
	IRRITATION DATA; SKIN (RABBIT) = 500 mg/24 H (SEVERE); EYE (RABBIT) = 50
	ug/24H (SEVERE). POTASSIUM HYDROXIDE: ORAL LD50 (RAT) >273 mg/kg.
	PHOSPHINOCARBOXYLIC ACID POLYMER: ORAL LD50 (RAT) = >5,000 mg/kg; SKIN
	AND EYE IRRITATION (RABBIT) = NON-IRRITANT. DIETHYLAMINOETHANOL: ORAL
	LD50 (RAT) = 1300 mg/kg; DERMAL LD50 (RABBIT) = 1100 mg/kg; INHALATION LC50
	(MOUSE) = 1320 mg/kg.

SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:

SODIUM SULFITE: 96 HR LC50 (GOLDFISH) = 100 mg/l; 24, 48, 96 HR TLm (MOSQUITO FISH) = 2600 ppm. 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. 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. PHOSPHINOCARBOXYLIC ACID POLYMER (DATA FOR A SIMILAR PRODUCT): RAINBOW TROUT: 96 HR LC50>1000 ppm; ZEBRA FISH: 96 HR LC50>1000 ppm; BROWN SHRIMP: 96 HR LC50>10,000 ppm; DAPHNIA MAGNA: 24 HR EC50>320 ppm. DEAE: 24 Hr LC50 (DAPHNIA MAGNA) = 180 mg/l; 96 Hr. EC50 (FATHEAD MINNOW) = 1,780 mg/l; 96 Hr. LC50 (LEUCISCUS IDUS) = 100-220 mg/l; 72 Hr EC50 (ALGAE) = 30 mg/l.

SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations:	THIS PRODUCT HAS A SUFFICIENTLY HIGH ENOUGH pH TO BE CONSIDERED A CORROSIVE WASTE.
Procedures:	DISPOSAL BY USE PREFERRED BUT IF THIS NOT POSSIBLE, DILUTE WITH
	COPIOUS QUANTITIES OF WATER, NEUTRALIZE WITH DILUTE ACID AND FLUSH
	TO WASTE, PREFERABLY TO A SANITARY SEWER. HOWEVER, OBEY ALL
	FEDERAL, STATE OR LOCAL REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

Shipping Name:	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE)
Primary Hazard Class:	8
Identification No.:	UN3266
Packing Group:	
2004 NAERG No.:	154

SECTION 15: REGULATORY INFORMATION

Regulation CERCLA (40 CFR302.4): SARA 302 (Sect. 355, Appendix A):	<u>Material</u> SODIUM HYDROXIDE POTASSIUM HYDROXIDE <u>Material</u> NONE	<u>RQ</u> 1000 lbs. 1000 lbs. <u>TPQ</u>	Max. % 5 10 <u>Max. %</u>	
SARA 311/312:	<u>Categories</u> IMMEDIATE HEALTH		<u>Hazards</u> EYE, SKIN CORROSIVE	
SARA 313 (40 CFR 372.45):	Material NONE		<u>Max. %</u>	
CWA (40 CFR 401.15):	NONE			
RCRA (40 CFR 261): Notes:	NONE IF DISPOSED OF UNDILUTEI HAZARDOUS WASTE PER R	•	CT WOULD BE A D002 CORROSIVE DNS.	<u> </u>

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

STATE	INGREDIENT	<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	D
	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.