

MATERIAL SAFETY DATA SHEET

CW1394

SECTION 1:
IDENTIFICATION

Company Name:	QUALICHEM TECHNOLOGIES
Address:	885 WOODSTOCK RD, STE 430-111 ROSWELL, GA 30075
Phone No.	800.658.7716
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Emergency Phone No.	CHEM-TEL 800-255-3924
Date Prepared:	9/9/03
Date Revised:	5/15/09

SECTION 2:
INGREDIENTS

<u>MATERIAL</u>	<u>CAS NO.</u>	<u>%</u>
SULFURIC ACID	7664-93-9	< 15
(1-HYDROXYETHYLENE)DIPHOSPHONIC ACID	2809-21-4	< 3
POLYACRYLIC ACID TERPOLYMER	PROPRIETARY	< 3
BENZOTRIAZOLE	95-14-7	< 2

SECTION 3:
HEALTH HAZARDS

Ingestion:	MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY. DUE TO HIGH ACIDITY CAUSES SEVERE IRRITATION, PROBABLE BURNS OF INTERNAL TISSUES.
Inhalation:	NOT A LIKELY ROUTE OF EXPOSURE. INHALATION OF MIST SEVERELY IRRITATING TO RESPIRATORY TRACT.
Skin Contact:	PROLONGED CONTACT CAUSES SEVERE IRRITATION, PROBABLE BURNS.
Eye Contact:	BURNS AND EYE DAMAGE.
Other Information:	MAY CAUSE EROSION OF TEETH, BRONCHIAL IRRITATION WITH COUGH AND BLEEDING OF NOSE AND GUMS.

SECTION 4:
FIRST AID

Ingestion:	DRINK SEVERAL GLASSES OF MILK (PREFERRED) OR WATER TO DILUTE. DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET IMMEDIATE MEDICAL ATTENTION.
Inhalation:	REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST.
Skin Contact:	WASH WITH PLAIN WATER OR SOAP AND WATER. GET MEDICAL ATTENTION FOR BURNS.
Eye Contact:	IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION.
Notes to Physician:	THIS PRODUCT IS A STRONG ACID PRODUCT. TREAT SYMPTOMS WITH SUPPORTIVE MEASURES.

SECTION 5:
FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method:	NONE
Lower Limit in Air:	N.A.
Upper Limit in Air:	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:	DO NOT USE SOLID WATER STREAMS NEAR RUPTURED TANKS OR SPILLS. ACID REACTS VIOLENTLY WITH WATER AND CAN SPATTER ACID ONTO PERSONNEL.
Combustion Products:	IF WATER IS EVAPORATED, OXIDES OF CARBON, SULFUR, AND PHOSPHORUS MAY BE PRODUCED.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Environmental Precautions: Procedures for Clean Up: Prohibited Materials:	WEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8. THIS PRODUCT CAN BE HAZARDOUS IF SPILLS ARE ACCIDENTLY RELEASED INTO THE ENVIRONMENT. SMALL SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER, PREFERABLY TO A SEWER OR WASTE TREATMENT FACILITY. LARGER SPILLS SHOULD BE DIKED TO PREVENT RUN OFF. IF POSSIBLE, PUMP LIQUID INTO A SUITABLE ACID RESISTANT CONTAINER FOR DISPOSAL. OTHERWISE, NEUTRALIZE WITH SODA ASH OR OTHER APPROPRIATE ALKALINE MATERIAL NEUTRALIZED MATERIAL MAY BE ABSORBED IN SAWDUST OR OTHER SUITABLE ABSORBANT AND SWEEPINGS DISPOSED OF IN AN APPROVED LANDFILL. OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS. NONE
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SECTION 7: HANDLING AND STORAGE

Handling: Storage:	THIS PRODUCT IS A STRONG ACID MATERIAL AND THE WEARING OF INDICATED PROTECTIVE EQUIPMENT IS REQUIRED WHEN HANDLING THE UNDILUTED MATERIAL. KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL, DRY PLACE. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.
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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautionary Measures: Engineering Controls: Control Limits: Equipment for Personal Protection:	STANDARD INDUSTRIAL HANDLING PRECAUTIONS. WASH THOROUGHLY AFTER HANDLING CHEMICALS. USE WITH ADEQUATE VENTILATION TO KEEP EXPOSURES BELOW OCCUPATIONAL EXPOSURE LIMITS. SULFURIC ACID: OSHA (PEL) = 1 mg/m ³ (TWA); ACGIH (TLV) = 0.2 mg/m ³ (T) (TWA). SAFETY GLASSES WITH SIDE SHIELDS, CHEMICAL GOGGLES OR FACESHIELD, IMPERMEABLE GLOVES, AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION IN AREA OF USE.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Odor: pH (undiluted): Specific Gravity: Density: Solubility in Water: Boiling Point: Percent Volatile: Vapor Pressure (mmHg): Vapor Density: Evaporation Rate:	CLEAR LIQUID PRACTICALLY NONE <1 1.11 - 1.13 9.4 lbs./gal. COMPLETE >212°F >60 N.D. N.D. (water=1): ~1
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SECTION 10: STABILITY AND REACTIVITY

Stability: Conditions to Avoid: Hazardous Polymerization: Conditions to Avoid: Incompatibility: Hazardous Decomposition Products:	STABLE NONE STABLE NONE MAY REACT VIOLENTLY WITH STRONG OXIDIZING AGENTS OR ALKALIES. IF WATER EVAPORATED, OXIDES OF CARBON, SULFUR, AND PHOSPHORUS COULD BE PRODUCED BY COMBUSTION.
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SECTION 11: TOXICOLOGICAL INFORMATION

Material & Tests:	SULFURIC ACID: ORAL LD ₅₀ (RAT) - 2140 mg/kg; INHALATION LC ₅₀ (RAT) - 510 mg/m ³ /2H. 1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONIC ACID: ORAL LD ₅₀ (MOUSE) 1800 mg/kg. POLYACRYLIC ACID TERPOLYMER: ORAL LD ₅₀ (RAT) >5000 mg/kg, DERMAL LD ₅₀ (RABBIT) >2000 mg/kg. BENZOTRIAZOLE: ORAL LD ₅₀ (RAT) - 560 mg/kg; INHALATION LC ₅₀ (RAT) - 1910 mg/m ³ /3 hr.
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SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:	SULFURIC ACID: LC ₅₀ FLOUNDER - 100 TO 300 mg/l/48 hr aerated water; LC ₅₀ PRAWN - 42.5 ppm/48 hr salt water. 1-HYDROXYETHYLIDIENE-1,1-DIPHOSPHONIC ACID: BLUEGILL SUNFISH (96 Hr LC ₅₀) 868 mg/l, RAINBOW TROUT (96 Hr LC ₅₀) 368 mg/l, DAPHNIA MAGNA (48 Hr EC ₅₀) 527 mg/l. TERPOLYMER: RAINBOW TROUT (96 Hr LC ₅₀) 1200 ppm; BLUEGILL SUNFISH (96 Hr LC ₅₀) >2000 ppm; DAPHNIA MAGNA (48 Hr LC ₅₀) 3600 ppm. BENZOTRIAZOLE: LC ₅₀ (TROUT) - 39 mg/L; LC ₅₀ (ALGAE) - 15.4 mg/L; LC ₅₀ (DAPHNIA MAGNA) 48 HRS - 141.6 mg/L.
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SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations:	THIS PRODUCT HAS A SUFFICIENTLY LOW ENOUGH pH TO BE CONSIDERED A CORROSIVE WASTE. RCRA D002 CORROSSIVE. DISPOSAL BY USE PREFERRED BUT IF THIS NOT POSSIBLE, DILUTE WITH COPIOUS QUANTITIES OF WATER, NEUTRALIZE WITH DILUTE ALKALAI AND FLUSH TO WASTE, PREFERABLY TO A SANITARY SEWER. HOWEVER, OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS.
Procedures:	

SECTION 14: TRANSPORT INFORMATION

Shipping Name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULFURIC ACID)
Primary Hazard Class:	8
Identification No.:	UN3264
Packing Group:	II
2004 NAERG No.:	154

SECTION 15: REGULATORY INFORMATION

<u>Regulation</u>	<u>Material</u>	<u>RQ</u>	<u>Max. %</u>
CERCLA (40 CFR302.4):	SULFURIC ACID	1000 lbs.	15
SARA 302 (Sect. 355, Appendix A):	<u>Material</u>	<u>TPQ</u>	<u>Max. %</u>
	SULFURIC ACID	1000 lbs.	15
SARA 311/312:	<u>Categories</u>	<u>Hazards</u>	
	IMMEDIATE HEALTH	EYE, SKIN CORROSIVE	
SARA 313 (40 CFR 372.45):	<u>Material</u>	<u>Max. %</u>	
	NONE		
CWA (40 CFR 401.15):	NONE		
RCRA (40 CFR 261):	NONE		
Notes:	IF DISPOSED OF UNDILUTED, THIS PRODUCT WOULD BE A D002 CORROSIVE HAZARDOUS WASTE PER RCRA REGULATIONS.		
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.		

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SPECIAL STATE REGULATIONS

<u>STATE</u> CA, MN, NJ, PA	<u>INGREDIENT</u> SULFURIC ACID	<u>%</u> < 15	<u>REGULATORY DESIGNATION</u> HAZARDOUS MATERIALS LISTS
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SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

<u>NFPA*</u>	<u>HAZARD</u>	<u>HMIS*</u>
3	HEALTH (Blue)	3
0	FIRE (Red)	0
1	REACTIVITY (Yellow)	1
	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.