

# MATERIAL SAFETY DATA SHEET

## CWT1216

**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:	8/3/02
Date Revised:	5/18/09

**SECTION 2:**
**INGREDIENTS**

MATERIAL	CAS NO.	%
SULFONATED COPOLYMER	PROPRIETARY	< 5
1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONIC ACID	2809-21-4	< 5
SULFURIC ACID	7664-93-9	< 5
ZINC CHLORIDE	7646-85-7	< 5
SODIUM MOLYBDATE	10102-40-6	< 2
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, POSSIBLE BURNS OF INTERNAL TISSUES.
Inhalation:	NOT A LIKELY ROUTE OF EXPOSURE. INHALATION OF MIST IRRITATING TO RESPIRATORY TRACT.
Skin Contact:	CONTACT CAUSES SEVERE IRRITATION, POSSIBLE BURNS.
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 IMMEDIATE MEDICAL ATTENTION.
Inhalation:	REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN IMMEDIATELY.
Skin Contact:	WASH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE REUSE. GET IMMEDIATE MEDICAL ATTENTION.
Eye Contact:	IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION.
Notes to Physician:	THIS PRODUCT IS A STRONG, ACIDIC 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 SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN CONFINED AREAS.
Procedures:	
Unusual Hazards:	DO NOT USE SOLID WATER STREAMS NEAR RUPTURED TANKS OR SPILLS. ACID REACTS VIOLENTLY WITH WATER AND CAN SPATTER ACID ONTO PERSONNEL. IF WATER IS EVAPORATED, OXIDES OF CARBON, NITROGEN, PHOSPHORUS, AND
Combustion Products:	SULFUR 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 SPECIFIED IN SECTION 8. THIS PRODUCT HAS A HIGH HAZARD POTENTIAL IF RELEASED INTO THE ENVIRONMENT ACCIDENTLY.  VENTILATE AREA OF LEAKE OR SPILL. KEEP UNNECESSARY AND UNPROTECTED PEOPLE AWAY. CONTAIN AND RECOVER LIQUID WHEN POSSILBE. NEUTRALIZE WITH ALKLINE MATERIAL (SODA ASH, LIME), THEN ABSORB WITH AN INERT MATERIAL (VERMICULITE, DRY SAND, EARTH), AND PLACE IN A CHEMICAL WASTE CONTAINER. DO NOT USE COMBUSTIBLE MATERIALS SUCH AS SAWDUST. DO NOT FLUSH TO SEWER! FOLLOW 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 OUT OF DIRECT SUNLIGHT AND AWAY FROM HEAT AND INCOMPATIBLE MATERIALS. KEEP 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 <sup>3</sup> (TWA); ACGIH (TLV) = 0.2 mg/m <sup>3</sup> (T) (TWA). ZINC CHLORIDE: OSHA PEL AND ACGIH TLV - 1 mg/m <sup>3</sup> (AS FUME) (8 HR. TWA). SODIUM MOLYBDATE - OSHA PEL: 5 mg/m <sup>3</sup> FOR SOLUBLE MOLBYDENUM COMPOUNDS AS Mo.  SAFETY GLASSES WITH SIDE SHIELDS, CHEMCAL 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 YELLOW LIQUID PRACTICALLY NONE < 1 1.04 – 1.06 8.8 lbs./gal. COMPLETE >212°F >70 N.D. N.D. (water=1): ~1
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### SECTION 10: STABILITY AND REACTIVITY

Stability:	STABLE
Conditions to Avoid:	HEAT, INCOMPATIBLES
Hazardous Polymerization:	STABLE
Conditions to Avoid:	NONE
Incompatibility:	POTASSIUM CHLORATE, POTASSIUM PERMANGANATE, SODIUM, LITHIUM, ORGANIC MATERIALS, HALOGENS, METALS, STRONG OXIDIZING AND REDUCING AGENTS.
Hazardous Decomposition Products:	IF WATER EVAPORATED, OXIDES OF CARBON, NITROGEN, PHOSPHORUS, AND SULFUR COULD BE PRODUCED BY COMBUSTION.

### SECTION 11: TOXICOLOGICAL INFORMATION

Material & Tests:	SULFURIC ACID: ORAL LD <sub>50</sub> (RAT) - 2140 mg/kg; INHALATION LC <sub>50</sub> (RAT) - 510 mg/m <sup>3</sup> /2H. 1-HYDROXYETHYLIDENE-1,1-DIPHOSPHONIC ACID: ORAL LD <sub>50</sub> (MOUSE) 1800 mg/kg. SULFONATED COPOLYMER: ORAL LD <sub>50</sub> (RAT) > 2g/kg. BENZOTRIAZOLE: ORAL LD <sub>50</sub> (RAT) - 560 mg/kg; INHALATION LC <sub>50</sub> (RAT) - 1910 mg/m <sup>3</sup> /3 hr. ZINC CHLORIDE: ORAL LD <sub>50</sub> (RATS) 350 mg/kg, (GUINEA PIG) 200 mg/kg, INHALATION LC <sub>50</sub> (VARIOUS) 1200-2000 mg/m <sup>3</sup> - 10 MINUTES. SODIUM MOLYBDATE: ORAL LD <sub>50</sub> (RAT) 4000 mg/kg, INHALATION LC <sub>50</sub> (RAT) >2080 mg/m <sup>3</sup> /4 Hr.
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### SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:	SULFURIC ACID: LC <sub>50</sub> FLOUNDER - 100 TO 300 mg/l/48 hr aerated water; LC <sub>50</sub> PRAWN - 42.5 ppm/48 hr salt water. 1-HYDROXYETHYLIDIENE-1,1-DIPHOSPHONIC ACID: BLUEGILL SUNFISH (96 Hr LC <sub>50</sub> ) 868 mg/l, RAINBOW TROUT (96 Hr LC <sub>50</sub> ) 368 mg/l, DAPHNIA MAGNA (48 Hr EC <sub>50</sub> ) 527 mg/l. SULFONATED COPOLYMER: FAT-HEAD MINNOW (96hr LC <sub>50</sub> ) >1,000 mg/l, DAPHNIA MAGNA (48 hr LC <sub>50</sub> ) = 837 mg/l, SELANASTRUM CAPRICORNUTUM (96 hr EC <sub>50</sub> ) = 25 mg/l. BENZOTRIAZOLE: LC <sub>50</sub> (TROUT) - 39 mg/L; LC <sub>50</sub> (ALGAE) - 15.4 mg/L; LC <sub>50</sub> (DAPHNIA MAGNA) 48 HRS - 141.6 mg/L. ZINC CHLORIDE: FLATHEAD MINNOW (96 Hr LC <sub>50</sub> ) 3.1 mg/l, DAPHNIA MAGNA (48 Hr LC <sub>50</sub> ) 3.7 mg/l. SODIUM MOLYBDATE: 96 HR LC <sub>50</sub> (STRIPED BASS) >79.8 mg/l; 96 WEEK EC <sub>50</sub> (AMPHIPOD) =2,650 mg/l.
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### SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations:	WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE HANDLED AS HAZARDOUS WASTE AND SENT TO A RCRA APPROVED WASTE FACILITY.
Procedures:	DISPOSAL BY USE PREFERRED, OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS.

### SECTION 14: TRANSPORT INFORMATION

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

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### SECTION 15:

### REGULATORY INFORMATION

<u>Regulation</u>	<u>Material</u>	<u>RQ</u>	<u>Max. %</u>
CERCLA (40 CFR302.4):	SULFURIC ACID	1000 lbs.	5
	ZINC CHLORIDE	1000 lbs	5
SARA 302 (Sect. 355, Appendix A):	<u>Material</u>	<u>TPQ</u>	<u>Max. %</u>
	SULFURIC ACID	1000 lbs.	5
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>
	SULFURIC ACID – LISTED		5
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.		

### SPECIAL STATE REGULATIONS

<u>STATE</u>	<u>INGREDIENT</u>	<u>%</u>	<u>REGULATORY DESIGNATION</u>
CA, MA, MN, NJ, PA	SULFURIC ACID	< 5	HAZARDOUS MATERIALS LISTS
CA, NM, NJ, PA	ZINC CHLORIDE	< 5	HAZARDOUS MATERIALS LISTS

### 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.