

MATERIAL SAFETY DATA SHEET

FORMULA 3070-F

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

<u>MATERIAL</u>	<u>CAS NO.</u>	<u>%</u>
SODIUM SULFITE	7757-83-7	5 - 10
SODIUM HYDROXIDE	1310-73-2	< 10
POTASSIUM HYDROXIDE	1310-58-3	< 10
PHOSPHINOCARBOXYLIC ACID POLYMER	PROPRIETARY	< 5
DIETHYLAMINOETHANOL	100-37-8	< 3
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 SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN UNCONFINED AREAS.
Procedures:	
Unusual Hazards:	NONE
Combustion Products:	IF WATER IS EVAPORATED, OXIDES OF CARBON AND PHOSPHORUS MAY BE PRODUCED.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	WEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8. THIS PRODUCT HAS A MODERATE HAZARD POTENTIAL IF RELEASED INTO THE ENVIRONMENT ACCIDENTLY.
Environmental Precautions:	
Procedures for Clean Up:	
Prohibited Materials:	

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:	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:	
Control Limits:	
Equipment for Personal Protection:	

USE WITH ADEQUATE VENTILATION TO KEEP EXPOSURES BELOW OCCUPATIONAL EXPOSURE 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)

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
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
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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SECTION 11: TOXICOLOGICAL INFORMATION

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.
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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.
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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:	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):	SODIUM HYDROXIDE	1000 lbs.	10
	POTASSIUM HYDROXIDE	1000 lbs.	10
SARA 302 (Sect. 355, Appendix A):	<u>Material</u>	<u>TPQ</u>	<u>Max. %</u>
	NONE		
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.		

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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.
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SPECIAL STATE REGULATIONS

STATE NONE	INGREDIENT	%	REGULATORY DESIGNATION
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SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

<u>NFPA*</u>	<u>HAZARD</u>	<u>HMIS*</u>
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.