

MATERIAL SAFETY DATA SHEET

Q-CID H

SECTION 1:

IDENTIFICATION

Company Name:	QUALICHEM TECHNOLOGIES
Address:	885 WOODSTOCK RD ROSWELL, GA 30075
Phone No.	(800) 658-7716
Fax No.	(877) 209-1556
Emergency Phone No.	CHEM-TEL 800-255-3924
Date Prepared:	3/1/89
Date Revised:	10/11/05

SECTION 2:

INGREDIENTS

Hazardous Ingredients

MATERIAL

CAS NO.

%

TLV

HYDROCHLORIC ACID

7647-01-0

<35.0

5 ppm Ceiling

Non-Hazardous Ingredients

BIODEGRADABLE ACID INHIBITOR
WATER

<2.0
BAL.

NONE ESTAB.
NONE ESTAB.

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:	INHALATION OF VAPORS OR MIST HIGHLY IRRITATING TO RESPIRATORY TRACT. CAN CAUSE CAUGHING, CHOKING, INFLAMATION OF THE NOSE, THROAT AND UPPER RESPIRATORY TRACT AND IN SEVERE CASES, PULMONARY EDMA, CIRCULATORY FAILURE AND DEATH.
Skin Contact:	PROLONGED CONTACT CAUSES SEVERE IRRITATION, PROBABLE BURNS.
Eye Contact:	CAUSES SEVERE IRRITATION, POTENTIAL BURNS AND EYE DAMAGE.
Other Information:	OTHER THAN ACUTE EFFECTS LISTED ABOVE, LONG TERM EFFECTS POSSIBLE ARE EROSION OF TEETH. HOWEVER, LONG TERM EXPOSURES ARE RARE DUE TO THE CORROSIVE NATURE OF THE PRODUCT.

SECTION 4:

FIRST AID

Ingestion:	DRINK SEVERAL GLASSES OF MILK (PREFERRED) OR WATER TO DILUTE. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.
Inhalation:	REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST.
Skin Contact:	REMOVE CONTAMINATED CLOTHING AND THEN WASH WITH PLAIN WATER OR SOAP AND WATER. GET MEDICAL ATTENTION IF BURNS OCCUR.
Eye Contact:	IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION.
Notes to Physician:	THIS PRODUCT IS A STRONG ACID WHICH CAN BURN MOST TISSUES. TREAT SYMPTOMS WITH SUPPORTIVE MEASURES.

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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:	CONTACT WITH METALS CAN RELEASE HYDROGEN GAS.
Combustion Products:	IF WATER EVAPORATED, COMBUSTION COULD PRODUCE CHLORINE FUMES.

SECTION 6:

ACCIDENTAL RELEASE MEASURES

Personal Precautions:	THE WEARING OF SAFETY GLASSES, RUBBER GLOVES, APRON AND BOOTS ARE RECOMMENDED. IN CONFINED AREAS, USE POSITIVE PRESSURE BREATHING APPARATUS.
Environmental Precautions:	THIS PRODUCT CAN BE HAZARDOUS IF SPILLS ARE ACCIDENTLY RELEASED INTO THE ENVIRONMENT. CONTAIN AND RECOVER SPILLS IF POSSIBLE.
Procedures for Clean Up:	SMALL SPILLS MAY BE NEUTRALIZED WITH A DILUTE ALKALAI AND THEN FLUSHED WITH COPIOUS QUANTITIES OF WATER, PREFERABLY TO A SANITARY SEWER. LARGER SPILLS SHOULD BE DIKED TO MINIMIZE RUN-OFF AND NEUTRALIZED WITH DILUTE ALKALAI. LIQUID MAY BE ABSORBED IN SAWDUST OR ANY AVAILABLE ABSORBANT AND SWEEPINGS DISPOSED OF IN A LANDFILL. NEUTRALIZED MATERIAL IS NON-HAZARDOUS. OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS.
Prohibited Materials:	NONE

SECTION 7:

HANDLING AND STORAGE

Handling:	THIS PRODUCT IS A STRONG ACID 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, VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.

SECTION 8:

EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautionary Measures:	STANDARD INDUSTRIAL HANDLING PRECAUTIONS.
Engineering Controls:	MECHANICAL VENTILATION REQUIRED IN A CONFINED AREA TO KEEP CONCENTRATIONS OF VAPORS BELOW THE RECOMMENDED TLV.
Control Limits:	TLV =5 ppm CEILING. A WELL VENTILATED AREA IS THE PREFERRED METHOD OF PROTECTION.
Equipment for Personal Protection:	IF THE EXPOSURE LIMIT IS EXCEEDED, A FULL FACE RESPIRATOR WITH AN ACID GAS CARTRIDGE MAY BE WORN UP TO 50 TIMES THE EXPOSURE LIMIT OR THE MAXIMUM USE CONCENTRATION SPECIFIED BY THE APPROPRIATE REGULATORY AGENCY OR RESPIRATOR SUPPLIER. IN EMERGENCIES OR WHERE EXPOSURE LEVELS ARE UNKNOWN, USE A FULL FACE POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR. EYEWASH STATION AND SAFETY SHOWER IN AREA OF USE.

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SECTION 9:

PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	PALE YELLOW LIQUID
Odor:	STRONG PUNGENT
pH (undiluted):	<1
Specific Gravity:	1.15-1.17
Density:	9.67 lbs./gal.
Solubility in Water:	COMPLETE
Boiling Point:	>212°F
Percent Volatile:	100%
Vapor Pressure (mmHg):	23 mmHg @20°C
Vapor Density:	1.3
Evaporation Rate:	(water=1): >1

SECTION 10:

STABILITY AND REACTIVITY

Stability:	STABLE
Conditions to Avoid:	DO NOT TRANSFER USING PRESSURE.
Hazardous Polymerization:	STABLE
Conditions to Avoid:	NONE
Incompatibility:	STRONG ALKALIES OR OXIDIZING AGENTS.
Hazardous Decomposition Products:	HYDROGEN CHLORIDE (Gas), HYDROGEN CHLORINE WITH OXIDIZERS.

SECTION 11:

TOXICOLOGICAL INFORMATION

Material & Tests:	ORAL LD ₅₀ 900 mg/Kg (Rabbit). INHALATION LC _{LO} 1300 ppm/30 minutes (Human).
Symptoms:	SEVERE PAIN FROM BURNS IN CONTACTED AREAS.
Effects:	BURNS AND TISSUE DAMAGE.

SECTION 12:

ECOLOGICAL INFORMATION

Possible Effects:	TOXIC EFFECTS MINIMAL UNLESS SUFFICIENT MATERIAL TO DRASTICALLY EFFECT pH IS RELEASED.
Biodegradability:	ALL ORGANIC COMPONENTS ARE BIODEGRADABLE.
Persistence:	NOT PERSISTENT.
Aquatic Toxicity:	N.D.

SECTION 13:

DISPOSAL CONSIDERATIONS

General Considerations:	THIS PRODUCT HAS A SUFFICIENTLY LOW 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 ALKALAI 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, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID)
Primary Hazard Class:	8
Secondary Hazard Class:	NONE
Identification No.	UN3264
Packing Group:	PG II
1996 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):	HYDROCHLORIC ACID	5,000 Lbs.	35%
	<u>Material</u>	<u>TPQ</u>	<u>Max. %</u>
SARA 302 (Sect. 355, Appendix A):	HYDROCHLORIC ACID	500 Lbs.	35%
	<u>Categories</u>	<u>Hazards</u>	
SARA 311/312 :	IMMEDIATE HEALTH	EYE, SKIN CORROSIVE	
	<u>Material</u>	<u>Max. %</u>	
SARA 313 (40 CFR 372.45):	NONE		
CWA (40 CFR 401.15):	NONE		
RCRA (40 CFR 261):	NONE	IF DISPOSED OF UNDILUTED, THIS PRODUCT WOULD BE A D002 CORROSIVE HAZARDOUS WASTE PER RCRA REGULATIONS.	
Notes:			
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>
NONE			

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

<u>NFPA*</u>	<u>HAZARD</u>	<u>HMIS*</u>
2	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

Prepared By: Environmental Manager

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.