Product ID:HYDROCHLORIC ACID, 30%-38% MSDS Date:10/30/1996 FSC:6810 NIIN:01-454-9224 Status Code:A MSDS Number: CKCJV === Responsible Party === **Company Name: ANACHEMIA CHEMICALS INC** Address:3 LINCOLN BLVD **City:ROUSES POINT** State:NY ZIP:12979 Country:US Info Phone Num:518-297-4444 Emergency Phone Num:514.489.5711 Preparer's Name: MSDS DEPARTMENT Chemtrec Ind/Phone:(800)424-9300 CAGE:4A444 === Contractor Identification === **Company Name: ANACHEMIA CHEMICALS INC** Address:3 LINCOLN BLVD Box:City:ROUSES POINT State:NY ZIP:12979 Country:US Phone:518-297-4444 CAGE:4A444

Ingred Name:HYDROCHLORIC ACID CAS:7647-01-0 RTECS #:MW4025000 Minumum % Wt:30. Maxumum % Wt:38. OSHA PEL:C7 MG/M3;C5 PPM ACGIH STEL:C7.5 MG/M3;C5 PPM EPA

Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:WATER CAS:7732-18-5 RTECS #:ZC0110000 Minumum % Wt:62. Code:F Maxumum % Wt:70. Code:F

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Acute and Chronic:HARMFUL BY INGESTION, INHALATION OR SKIN ABSORPTION. CORROSIVE. TARGET ORGANS: SKIN, EYES, LUNGS, RESPIRTORY SYSTEM. 100 PPM IS IMMEDIATELY DANGEROUS TO LIFE OR HEALTH. EYES: EXTREMELY CORRO

SIVE. PROL ONGED CONTACT MAY CAUSE

PERMANENT EYE INJURY AND BLINDNESS. SKIN: SEVERE BURNS. INHALATION: EXTREMELY DESTRUCTIVE TO MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT. INHALATION MAY BE FATAL AS A RESULT O F SPASM, INFLAMMATION AND EDEMA OF THE LARYNX, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA. INGESTION: BURNS IN MOUTH, PHARYNX, AND GASTROINTESTINAL TRACT. ASPHYXIA MAY OCCUR FROM EDEMA OF THE GLOTTIS.

Effects of Overexposure:EYES: SEVERELY IRRITATING, DAMAGE, EYE I NJURY,

BLINDNESS. SKIN: SEVERE BURNS, PAIN, BROWNISH OR YELLOW STAINS: PENETRATES FULL THICKNESS OF SKIN, DERMATITIS, PHOTOSENSITIZATION. INHALATION: MUCOUS M EMBRANES AND UPPER RESPIRATORY TRACT TISSUE DESTRUCTION, INFLAMATION AND EDEMIA OF LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS, PULMONART EDEMA. BURNING SENSATION, COUGHING, LARYNGITIS, DYSPNEA, HEADACHE, NAUSEA, VOMITING, LUNG DAMAGE. INGESTION: BURNS IN MOUTH, PHARYNX, GI TRACT. WEAKNESS, NAUSEA, VOMITING,

DYSPHAGIA, ABDOMINAL PAIN, CARDIOVASCULAR COLLAPSE, CONVULSIONS, COMA, DEATH, ASPHYXIA.

First Aid:EYES: FLUSH WITH COPIOUS AMOUNTS OF WATER FOR 30 MINUTES. HOLDING LIDS APART TO ENSURE FLUSHING ENTIRE SURFACE. SPEED IS ESSENTIAL. GET MEDICAL ATTENTION. DO NOT USE CHEMICAL ANTIDOTES. SKIN: FLUSH W ITH PLENTY OF WATER FOR 30 MINS. WHILE REMOVING CONTAMINATED CLOTHING. GET MEDICAL ATTENTION. DO NOT USE CHEM ICAL

ANTIDOTES. INHALATION: MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. GET MEDICAL ATTENTION. INGESTION: WASH OUT MOUTH WITH WATER. GIVE SEVERAL GLASSES OF WATER OR MILK, REPEAT IF VOMITING. DO NOT INDUCE VOMITING. AIM TO DILUTE ACID 100 TIMES. G ET MEDICAL ATTENTION.

Extinguishing Media:USE EXTINGUISHING MEDIA SUITABLE FOR SURROUNDING MATERIALS. COOL CONTAIN

ING VESSELS W/FLOODING QUANTITIES OF WATER

UNTIL WELL AFTER FIRE IS OUT. DO NOT GET WATER INSIDE CONTAINER. Fire Fighting Procedures:WEAR ADEQUATE PERSONAL PROTECTION TO PREVENT CONTACT WITH MATERIAL OR ITS COMBUSTION PRODUCT. SELF CONTAINED BREATHING APARATUS WITH FULL FACEPIECE OPERATED IN PRESSURE DEMAND OR OTHER POSITIVE PRESSU RE MODE. COOL CONTAINERS WITH FLOODING AMOUNTS OF WATER UNTIL WELL AFTER FIRE IS OUT. DO NOT GET WATER INSIDE CONTAINER.

Unusual Fire/Explosio

n Hazard:FLAMMABLE/EXPLOSIVE HYDROGEN GAS MAY BE FORMED UPON CONTACT OF THIS PRODUCT WITH METALS. THE SENSITIVITY TO IMPACT IS NOT APPLICABLE. THE SENSITIVITY TO STATIC DISCHARGE IS NOT APPLICABLE. EMITS TOXIC AND CORROSIVE FUMES UNDER FIRE CONDITIONS. FIRE DEGRADATION PRODUCTS: HYDROGEN CHLORIDE GAS.

Spill Release Procedures: EVACUTE AND VENTILATE AREA. COVER WITH SODA ASH OR LIME. THIS WILL RELEASE CARBON

DIOXIDE, SO USE CAUTION.

PLACE IN SUITABLE CONTAINER AND MARK FOR DISPOSAL. WASH SPILL SITE AFTER MATERIAL PICK UP IS COMPLETE. DO NOT EMPTY INTO DRAINS. DO NOT TOUCH DAMAGED CONTAINER OR SPILLED MATERIAL. STAY UPWIND. KEEP OUT OF LOW AREAS.

Neutralizing Agent:SODA ASH OR LIME

Handling and Storage Precautions:STORE IN COOL, DRY, WELL VENTILATED PLACE AWAY FROM HEATED AREAS, SPARKS, FLAMES, DIRECT SUNLIGHT STRONG INCONDESCENT LIGHT, INCOMPATIBLE MATERIALS. DO NOT ADD OTHER MATERIAL TO CONTAINER. DO NOT WA SH DOWN THE DRAIN. DO NOT BREATHE GAS, FUMES, VAPORS, SPRAY. KEEP CONTAINER TIGHTLY CLOSED AND DRY. Other Precautions: MANIPULATE UNDER FUME HOOD. DO NOT USE PRESSURE TO DISPENSE. MAY CORRODE METALIC SURFACES. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUE. HANDLE AND OPEN CONTAINER WITH CARE. DO

NOT GET IN EYES, ON S KIN, ON CLOTHING. WASH AFTER USE. DO NOT ALLOW SM OKING AND FOOD CONSUMPTION WHILE HANDLING. WEAR PRO TECTIVE

Respiratory Protection:NONE REQUIRED IF HANDLED IN CLOSED VENTILATION SYSTEMS. WHERE REQUIRED (LEAK, SPILL, OPEN HANDLING OF LIQUID) USE A NIOSH-APPROVED CHEMICAL CARTRIDGE RESPIRATOR FOR GAS BELOW 50 PPM. FOR GAS ABOVE 50 PPM OR MIST, USE NIOSH APPROVED SELF-CONTAINTED BREATHING APPARATUS OR AIR-SUPPLIED RESPIRATOR, BOTH WITH FULL F

ACEPIECES.

CLOTHING.

Ventilation:USE ONLY IN CHEMICAL FUME HOOD TO KEEP AIRBORNE LEVELS BELOW EXPOSURE LIMITS. USE CORROSION PROOF VENTILATION. DO NOT USE IN UNVENTILATED SPACES.

Protective Gloves: IMPERVIOUS GLOVES (NEOPRANE)

Eye Protection: FACE SHIELD AND SPLASH GOGGLES. DO NOT WEAR CONTACT LENSES.

Other Protective Equipment:APRON, COVERALLS, OR OTHER RESISTANT PROTECTIVE CLOTHING AS REQUIRED FOR WORKPLACE CONDITIONS TO PREVENT CONTACT WITH HYDROCHLORIC ACID SOLUTIONS. WEAR SUFFICIEN T

PROTECTIVE CLOTHING TO PROTECT SKIN.

Work Hygienic Practices:DO NOT BREATHE VAPOR. AVOID CONTACT WITH PRODUCT. AVOID PROLONGED OR REPEATED EXPOSURE. USE ONLY IN FUME HOOD. HANDLE AND OPEN CONTAINER WITH CARE. CONTAINER SHOULD BE OPENED ONLY BY QUALIFIED PERSON.

Supplemental Safety and Health

HAVE AVAILABLE AND USE AS APPROPRIATE: SUITS, APRONS, AND BOOTS. MAKE EYE BATH AND EMERGENCY SHOWER AVAILABLE. ENSURE THAT EYEWASH STATION AND SAFETY SHOWER ARE CLOSE TO THE WORK-ST ATION.

HCC:C1 NRC/State Lic Num:NP Boiling Pt:B.P. Text:48.5 TO 110C(119.3-230 Melt/Freeze Pt:=-27.C, -16.6F Decomp Temp:Decomp Text:NP Vapor Pres:150 MM OF HG @20 C Vapor Density:1.3 AIR=1 Spec Gravity:1.19 TO 1.16 (WATER=1) pH:0.1 1M SOLUTION Evaporation Rate & amp; Reference:>1 Solubility in Water:MISCIBLE Appearance and Odor:COLORLESS FUMING LIQUID WITH PUNGENT ODOR. ODOR THRESHOLD: 5-10 PPM Percent Volatiles by Volume :100% (V/V)

Stability Indicator/Materials to Avoid:YES
REACTS WITH MOST METALS TO PRODUCE HYDROGEN. AMINES, METAL OXIDES, ACETIC ANHYDRIDE, BETA-PROPIOLACETONE, VINYLE ACETATE, MERCURIC SULFATE, CALCIUM PHOSPHIDE, FORMALDEHYDE, ALKALIES, CARBONATES, BASES, (CONTINUED IN "OTHER
Stability Condition to Avoid:NONE LISTED
Hazardous Decomposition Products:REACTS WITH MOST METALS TO PRODUCE HYDROGEN. WILL CORRODE A WI
DE VARIETY OF METALS.
Conditions to Avoid Polymerization:WILL NOT OCCUR.

Toxicological Information:CHRONIC OVEREXPOSURE: EROSION OF TEETH, ULCERATION OF NOSE, MOUTH, GUMS, BRONCHITIS. REPEATED OR PROLONGED SKIN CONTACT CAN CAUSE SEVERE DERMITITIS OR BURNS. CARCINOGENIC EFFECTS: NOT AVAAILABLE. MUTA GENIC EFFECTS: NOT AVAILABLE. TERATOGENIC EFFECTS: NOT AVAILABLE. TOXICITY OF PRODUCT TO REPRODUCTIVE SYSTEM: N OT AVAILABLE. TO BEST OF MANUFACTURERS KNOWLEDGE, CHEMICAL, PHYSICAL AND TOXICITY OF THIS SUBSTANCE HAS NOT BEEN FULLY INVESTIGATED. HYDROCHLORIC ACID: (RABBIT)ORAL (LD50): ACUTE 900 MG/KG. VAPOR (LC50): ACUTE 3124 PPM (RAT)(1 HR). 757 PPM (MOUSE)(1 HR). VAPOR (CLO): ACUTE: 1300 PPM (HUM AN)(30M).

Waste Disposal Methods:FOLLOW ALL APPLICABLE REGULATIONS. HARMFUL TO AQUATIC LIFE AT HIGH CONCENTRATIONS. CAN BE DANGEROUS IF ALLOWED TO ENTER DRINKING WATER INTAKES. DO NOT CONTAMINATE DOMESTIC OR IRRGATION WATER SUPPLIES, LAKES, STREAMS, PONDS, OR RIVERS.

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