ELF ATOCHEM NORTH AMERICA INC -- MURIATIC ACID 20 BAUME -- 6810-00-236-5665

Product ID:MURIATIC ACID 20 BAUME MSDS Date:12/29/1997 FSC:6810 NIIN:00-236-5665 Status Code:A MSDS Number: CJGJM === Responsible Party === Company Name: ELF ATOCHEM NORTH AMERICA INC Address:2000 MARKET ST City:PHILADELPHIA State:PA ZIP:19103-3222 Country:US Emergency Phone Num:215-419-7 695 Preparer's Name: PRODUCT SAFETY CAGE:86460 === Contractor Identification === Company Name: ELF ATOCHEM NORTH AMERICA INC Address:2000 MARKET STREET Box:City:PHILADELPHIA State:PA ZIP:19103-3222 Country:US Phone:800-245-5858 CAGE:86460 Ingred Name:WATER CAS:7732-18-5 RTECS #:ZC0110000 = Wt:68. Ingred Name: HYDROCHLORIC ACID CAS:7647-01-0 RTECS #:MW4025000 = Wt:32. OSHA PEL:C7 MG/M3;C5 PPM ACGIH STEL:C7.5 MG/M3;C5 PPM **EPA Rpt**

LD50 LC50 Mixture:LD50 = 700 MG/KG (ORAL, RAT, HCL 31.5%) Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Health Hazards Acute and Chronic:EYE EFFECTS-CORROSIVE, CAUSES EYE BURNS. SKIN EFFECTS-CORROSIVE Effects of Overexposure:EYE EFFECTS-MAY CAUSE BLINDNESS. SKIN

EFFECTS-CAUSES SKIN BURNS.

First Aid:INGE

STION-IF SWALLOWED, DO NOT INDUCE VOMITING. GIVE WATER TO DRINK. GET MEDICAL ATTENTION. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DERMAL-IF ON SKIN, IMMEDIATELY FLUSH WITH PLENTY OF W ATER FOR 15 MIN WHILE REMOVING CONTAMINATED CLOTHING/SHOES. GET MEDICAL ATTENTION. EYE CONTACT-IF IN EYES, IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MIN. GET MEDICAL ATTENTION. INHALATION-IF INHAL ED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT,

GIVE OXYGEN. GET MEDICAL ATTENTION.

Extinguishing Media:NA

Fire Fighting Procedures:FIRE FIGHTERS & OTHERS WHO MAY BE EXPOSED TO PRODUCTS OF COMBUSTION SHOULD WEAR FULL FIRE FIGHTING TURN OUT GEAR (FULL BUNKER GEAR) & SELF-CONTAINED BREATHING APPARATUS (PRESSURE DEMAND MSHA/NIOSH APP ROVED OR EQUIVALENT). FIRE FIGHTING EQUIPMENT SHOULD BE THOROUGHLY DECONTAMINATED AFTER USE.

Unusua

I Fire/Explosion Hazard:CONTACT WITH METAL CAN FORM HYDROGEN GAS. HYDROGEN IS EXTREMELY FLAMMABLE & CAN FORM EXPLOSIVE MIXTURES WITH AIR. CLOSED CONTAINERS MAY EXPLODE WHEN HEATED OR IF CONTENTS CONTAMINATED WITH WATER.

Spill Release Procedures:SMALL SPILLS SHOULD BE DIKED AND DILUTED WITH PLENTY OF WATER THEN NEUTRALIZED WITH AN ALKALI SUCH AS SODA ASH OR LIME. ADEQUATE VENTILATION IS REQUIRED FOR SODA ASH DUE TO RELEASE OF CARBON DIOXIDE G AS. NEUTRALIZATION WILL GENERATE HEAT. PLACE NEUTRALIZED MATERIAL INTO CLEAN PLASTIC CONTAINERS FOR DISPOSAL. FLUSH SPILL AREA WITH WATER AFTER REMOVAL OF PRODUCT. Neutralizing Agent:SODA ASH OR LIME.

Handling and Storage Precautions:DO NOT STORE NEAR STRONG BASE. HYDROCHLORIC ACID IS HIGHLY CORROSIVE TO STEELS. ALL METAL EQUIPMENT USED TO HANDLE THIS ACID MUST BE LINED W

ITH AN APPROPIATE

PROTECTIVE MATERIAL, SUCH AS RUBBER OR CER TAIN PLASTICS. CONTACT LINING MANUFACTURERS FOR COMPATIBILITY INFORMATION.

Other Precautions:OTHER PROTECTIVE EQUIPMENT: RUBBER OR NEOPRENE ACID SUIT, RUBBER SAFETY SHOES AND HARD HAT.

Respiratory Protection: AVOID BREATHING DUST OR MIST. USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION EQUIPMENT APPROPIATE TO THE MATERIAL &/OR IT COMPONENTS WHERE AI

RBORNE EXPOSURE IS LIKELY. FULL

FACEPIECE EQUIPMENT IS RECO MMENDED &, IF USED, REPLACES NEED FOR FACE SHIELD. OT GOGGLES.

Ventilation: IF PRACTICAL, USE LOCAL MECHANICAL EXHAUST VENTILATION AT SOURCES OF AIR CONTAMINATION SUCH AS OPEN PROCESS EQUIPMENT. Protective Gloves: SYNTHETIC GLOVES SHOULD BE WORN.

Eye Protection:WEAR CHEMICAL GOGGLES.

Other Protective Equipment: HAVE EYE FLUSHING EQUIPMENT IMMEDIATELY AVAILABLE. PROVIDE A SAFETY SHOWER AT ANY LOCATION WHERE SKIN CONTACT

CAN OCCUR. WASH THOROUGHLY AFTER HANDLING.

Work Hygienic Practices: WASH THOROUGHLY FATER HANDLING.

Supplemental Safety and Health

WEAR CHEMICAL GOGGLES, FACE SHIELD, AND CHEMICAL RESISTANT CLOTHING SUCH AS RUBBER APRON WHEN SPLASHING MAY OCCUR. RINSE IMMEDIATELY IF SKIN IS CONTAMINATED. REMOVE CONTAMINATED CLOTHING PROMPTLY & WA SH BEFORE RESUE. CLEAN PROTECTIVE EQUIPMENT BEFORE REUSE.

HCC:C1 Boiling Pt:=110.C, 23 0.F Melt/Freeze Pt:=-42.C, -43.6F Vapor Pres:92.32 MMHG Spec Gravity:1.1789 Solubility in Water:67% Appearance and Odor:CLEAR TO SLIGHTLY YELLOW LIQUID WITH SHARP, PUNGENT, IRRITATING ODOR. Percent Volatiles by Volume:100

Stability Indicator/Materials to Avoid:YES CONTACT WITH METALS, STRONG OXIDIZERS & STRONG ALKALIS MAY CAUSE A HIGH ENERGY RELEASE. CONTACT WITH WATER LIBERATES LARGE AMOUNTS OF HEAT. Hazardous Decompo sition Products:HYDROGEN GAS CAN BE LIBERATED ON CONTACT WITH METALS. CHLORINE GAS CAN BE LIBERATED ON CONTACT WITH OXIDIZERS.

Toxicological Information:SINGLE EXPOSURE (ACUTE) STUDIES WITH 31.5% HCL INDICATE: DERMAL-PRACTICALLY NON-TOXIC TO RABBITS (LD50>5,010 MG/KG), INHALATION-SLIGHTLY TOXIC TO RATS (4-HR LC50=4.66 MG/L), EYE IRRITATION-CORROSIVE T O RABBITS, SKIN IRRITATION-CORROSIVE TO RABBITS. ALTH

OUIGH HCL 35% HAS NOT BEEN TESTED, EFFECTS FOLLOWING EXPOSURE TO THIS PRODUCT ARE EXPECTED TO BE ESSENTIALLY THE SAME AS THOSE REPORTED FOR THE TES TED HCL 31.5%.

Waste Disposal Methods:THIS PRODUCT WOULD MEET THE RCRA DEFINITION OF A CORROSIVE HAZARDOUS WASTE (D002), IF INTENDED FOR DISPOSAL. CONSULT FEDERAL, STATE, OR LOCAL AUTHORITIES FOR PROPER DISPOSAL PROCEDURES.

Transport Information:INTERNATIONAL: BULK: RQ HYDROCHLORIC ACID, 8 CORROSIVE MATERIAL, UN 1789, PGII. SAMPLE: HYDROCHLORIC ACID, 8 CORROSIVE MATERIAL, UN1789, PGII LIMITED QUANTITY. DOMESTIC: BULK: RQ HYDROCHLORIC ACID SOL UTION, 8 CORROSIVE MATERIAL, UN1789, PGII. SAMPLE: HYDROCHLORIC ACID SOLUTION, 8 CORROSIVE MATERIAL, UN1789, PGII, LTD QTY.

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