

HYDROFLUORIC ACID, 49%

MSDS Number

BHLFD

National Stock Number

6810-00F009596

Product Name

HYDROFLUORIC ACID, 49%

Manufacturer

FISHER SCIENTIFIC

Product Identification

Product ID:HYDROFLUORIC ACID, 49%

MSDS Date:06/11/1986

FSC:6810

NIIN:00F009596

MSDS Number: BHLFD

Responsible Party

FISHER SCIENTIFIC

1 REAGENT LANE

FAIR LAWN , NJ 07410

Emergency Phone: (201) 796-7100

Info Phone: (201) 796-7100

Cage: 1B464

Contractor

FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

FAIRLAWN, NJ 07410-2802

US

201-796-7100

Cage: 1B464

Ingredients

HYDROGEN FLUORIDE (SARA III)

CAS: 7664-39-3

RTECS: MW7875000

Fraction By Weight: 49%

OSHA PEL3 PPM/6 STEL (F)

ACGIH TLV: C 3 PPM (F); 9192

EPA Report Quantity: 100 LBS

DOT Report Quantity: 100 LBS

WATER, H2O

CAS: 7732-18-5

RTECS: ZC0110000

Fraction By Weight: 51%

Hazards

LD50 LC50 Mixture:100 PPM/1 MIN MAN TCLO INHALATION
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHALATION: FEVER, COUGH, DYSPNEA, CYANOSIS, & PULMONARY EDEMA OR BRONCHOPNEUMONIA. CORROSIVE/HIGHLY TOXIC. HIGH LELS MAY CAUSE ULCERATIVE TRAACHEOBRONCHITIS/HEMORRHAGIC PULMONARY EDEMA. SKIN/EYES: IRRITATION, BURNS, BLINDNESS. INGESTION: NAUSEA, VOMITING, DIARRHEA, CONVULSIONS, DEATH.
Explanation of Carcinogenicity:NONE
Effects of Overexposure:HYDROGEN FLUORIDE IS A HIGHLY TOXIC, SEVERE EYE, MUCOUS MEMBRANE & SKIN IRRITANT. POISONING AFFECTS THE BRAIN, KIDNEYS, CARDIOVASCULAR, NEUROMUSCULAR, & GASTROINTESTINAL SYSTEM. CHRONIC EXPOSURE MAY PRODUCE FLUOROSIS OF SKELETAL SYSTEM.
INHALATION: SYMPTOMS CENTRAL NERVOUS/HEADACHE/SALIVATION/COMA/CONVULSIONS/DEATH.
Medical Cond Aggravated by Exposure:DEATH FROM PULMONARY EDEMA OCCURED W/IN 2 HRS IN 3 OF 6 WORKERS SPLASHED W/70% SOLUTION, DEPSITE PROMPT SHOWERING.

First Aid

First Aid:INHALATION: REMOVE FROM EXPOSURE AREA TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. KEEP AFFECTED PERSON WARM/AT REST. SKIN: REMOVE CONTAMINATED CLOTHING/SHOES. WASH AFFECTED AREA W/ SOAP OR MILD DETERGENT/LARGE AMTS OF WATER. EYES: WASH W/LARGE AMTS OF WATER. INGESTION: IF VICTIM IS CONSCIOUS, GIVE LARGE QTY'S OF WATER TO DILUTE THE ACID. DON'T INDUCE VOMITING. GET MED ATTN.

Fire Fighting

Flash Point:NONFLAMMABLE
Extinguishing Media:DRY CHEMICAL, CO2, WATER SPRAY, FOG OR ALCOHOL FOAM.
Fire Fighting Procedures:DON'T GET WATER INSIDE CONTAINER. MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. COOL FIRE-EXPOSED CONTAINERS W/WATER FROM SIDE UNTIL WELL AFTER FIRE IS OUT.
Unusual Fire/Explosion Hazard:ISOLATE AREA UNTIL GAS HAS DISPERSED. SLIGHT FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

Accidental Release

Spill Release Procedures:STOP LEAK IF YOU CAN DO IT W/O RISK. USE WATER SPRAY TO REDUCE VAPORS BUT DON'T PUT WATER ON LEAK OR SPILL AREA. ISOLATE AREA UNTIL GAS HAS DISPERSED. FOR LARGE SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. EVACUATE AREA ENDANGERED BY GAS.
Neutralizing Agent:SLAKED LIME, SODIUM BICARBONATE OR CRUSHED LIMESTONE

Handling

Handling and Storage Precautions:DON'T GET WATER INSIDE CONTAINER. MOVE CONTAINER FROM FIRE AREA IF POSSIBLE. AVOID BREATHING CORROSIVE VAPORS.

Exposure Controls

Respiratory Protection:SELF-CONTAINED BREATHING APPARATUS W/FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE, OR EQUIVALENT RESPIRATOR FOR LEVELS OF 15 MG/CUM.
Ventilation:PROVIDE LOCAL EXHAUST VENTILATION TO KEEP Protective Gloves:ACID RESISTANT
Eye Protection:SAFETY GOGGLES, FACESHIELD
Other Protective Equipment:PROVIDE AN EYE-WASH FOUNTAIN WITH THE IMMEDIATE WORK AREA.
Supplemental Safety and Health
POISONING MAY CAUSE HYPOMAGNESEMIA/HYPOCALCEMIA RESULTING IN TETANY ESPECIALLY OF EXTREMITIES/MUSCLE SPASMS/CONVULSIONS/PARASTHESIAS/HYPOTENSION/SHOCK/SINUS TACHYCARDIA/CARDIAC ARRHYTHMIAS/MULTIPLE ATTACKS OF VENTRICULAR FIBRILLATION/DEATH. REPEATED/PROLONGED EXPOSURE TO LOW VAPOR LEVELS MAY CAUSE CONJUNCTIVITIS.

Chemical Properties

Boiling Pt:B.P. Text:226F
Vapor Pres:10
Vapor Density:0.7
Spec Gravity:1.1-1.2
pH:ACID
Solubility in Water:COMPLETE
Appearance and Odor:COLORLESS, FUMING LIQUID WITH A PUNGENT ODOR.

Stability

Stability Indicator/Materials to Avoid:YES
REACTS EXOTHERMICALLY W/WATER. CORROSIVE TO GLASS, SILICEOUS MATERIALS,
METALS, CYANOGEN FLUORIDE, ARSENIC/CALCIUM OXIDE
Stability Condition to Avoid:HEAT, FLAME
Hazardous Decomposition Products:MAY RELEASE CORROSIVE HYDROGEN
FLUORIDE, HYDROGEN GAS.

Disposal

Waste Disposal Methods:SARA REPORTABLE QTY = 100 LBS.

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