

FISHER SCIENTIFIC, CHEMICAL DIV. -- HYDROFLUORIC ACID,A 146 -- 6810-00-237-2920

===== Product Identification =====

Product ID:HYDROFLUORIC ACID,A 146

MSDS Date:12/27/1994

FSC:6810

NIIN:00-237-2920

MSDS Number: CBRXH

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC, CHEMICAL DIV.

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100 OR 201-796-7523

Emergency Phone Num:201-796-7100/800-424-9300(CHEMTREC)

CAGE:1B464

=== Contractor Identification ===

Company Name:CHEMICAL COMMODITIES AGENCY, INC.

Address:27447 PACIFIC STREET

Box:City:HIGHLAND

State:CA

ZIP:92346-2640

Country:US

Phone:909-864-2310

CAGE:60777

Company Name:FISHER SCIENTIFIC CO. CHEMICAL MFG DIV

Address:1 REAGENT LANE

Box:City:FAIRLAWN

State:NJ

ZIP:07410-2802

Country:US

Phone:201-796-7100

CAGE:1B464

===== Composition/Information on Ingredients =====

Ingred Nam

e:HYDROGEN FLUORIDE (SARA 302/313) (CERCLA)  
CAS:7664-39-3  
RTECS #:MW7875000  
Fraction by Wt: 48 - 50%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:3 PPM (F)  
ACGIH TLV:C 3 PPM(F); 9596  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 50 - 52%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:NOT RELEVANT  
ACGIH TLV:NOT RELEVANT

===== Hazards Identification =====

LD50 LC50 Mixture:LD50 (ORAL, RAT) IS UNKNOWN.

Routes

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

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS:KIDNEYS, RESPIRATORY SYSTEM, SKELETAL STRUCTURES. ACUTE- CORROSIVE/TOXIC.

EYES/SKIN:CAUSES SEVERE BURNS, EYE DAMGE, SEVERE IRRITATION.

RAPIDLY ABSORBED THROUGH SKIN. ORAL:CAUSES SEVERE BURNS, TOXIC EFFECTS ON LIVER, HEART, KIDNEYS. INHALE:SEVERE IRRITATION, PAIN, INFLAMMATION. CHRONIC- CAUSES BRONCHITIS.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:SEVERE IRRITATION, SEVERE BURNS, COUGH, NAUSEA, NASAL DISCHARGE, RESPIRATORY FAILURE, REDNESS OF EYES, BLURRED VISION, BURNING SENSATION IN MOUTH AND PHARYNX, SALIVATION, ABDOMINAL PAIN, VOMITING BLOOD, DIARRHEA, HEMATURIA, DIFFICULTY BREATHING, SHOCK, RAPID PULSE, HYPOCALCEMIA, DEATH

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS OR EYE PROBLEMS OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO

## O THE EFFECTS OF THE SUBSTANCE.

### ===== First Aid Measures =====

First Aid:GET IMMEDIATE MEDICAL HELP FOR ALL CASES OF EXPOSURE.  
EYES/SKIN:FLUSH WITH WATER FOR AT LEAST 15 MINUTES. HOLD EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR. PROVIDE CPR/OXYGEN IF NECESSARY.  
ORAL:DO NOT INDUCE VOMITING. IF CONSCIOUS, DRINK 2-4CUPFULS OF MILK/WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.  
IF VOMITING OCCURS SPONTANEOUSLY, KEEP AIRWAY CLEAR.  
AR.

### ===== Fire Fighting Measures =====

Flash Point:NONE  
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.  
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.  
Unusual Fire/Explosion Hazard:CORROSIVE HYDROGEN FLUORIDE GAS

### ===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROPER PROTECTIVE EQUIPMENT. VENTILATE AREA. AVOID RUNOFF INTO STORM SEWERS AND DITCHES WHICH LEAD TO WATERWAYS. NEUTRALIZE SPILL WITH SODIUM BICARBONATE. COVER WITH INERT ABSORBENT. PLACE IN SUITABLE CONTAINER FOR DISPOSAL.  
Neutralizing Agent:SODIUM BICARBONATE

### ===== Handling and Storage =====

Handling and Storage Precautions:STORE IN COOL, WELL VENTILATED AREA, AWAY FROM INCOMPATIBLE SUBSTANCES.  
Other Precautions:CORROSIVE AND TOXIC. DO NOT TOUCH MATERIAL. KEEP CONTAINER TIGHTLY CLOSED. WASH THOROUGHLY AFTER HANDLING. AVOID BREATHING VAPORS. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. KEEP OUT OF REACH OF CHILDREN.

### ===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF ENGINEERING CONTROLS ARE INADEQUATE TO CONTROL VAPOR CONCENTRATIONS TO AN ACCEPTABLE LEVEL, A NIOSH-APPROVED SELF-CONTAINED

BREATHING APPARATUS/SUPPLIED-AIR

RESPIRATOR SHOULD BE WORN.

Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:PVC

Eye Protection:SPLASH-PROOF SAFETY GOGGLES & FACESHIELD

Other Protective Equipment:EYE WASH STATION, QUICK DRENCH SHOWER AND IMPERVIOUS CLOTHING

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOT

WEAR.

Supplemental Safety and Health

PERCENTAGE CHANGED. FOR PREVIOUS CONCENTRATIONS, SEE PNI A OR B, SAME NSN. NOTE TO PHYSICIAN: DUE TO DELAYED SYPTOMS, OBSERVE PATIENT CLOSELY FOR 48 HOURS. TREAT FOR ACID AND TOXIC FLUORIDE IONS.

===== Physical/Chemical Properties =====

HCC:C1

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:151F,66C

Melt/Freeze Pt:M.P/F.P Text:-96F,-71C

Vapor Density:2.21

Spec Gravity:1.2

pH: