

FISHER SCIENTIFIC -- SULFURIC ACID, A298 212 -- 6810-00-227-1845

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

Product ID:SULFURIC ACID, A298 212

MSDS Date:12/28/1994

FSC:6810

NIIN:00-227-1845

MSDS Number: CDMJZ

=== Responsible Party ===

Company Name:FISHER SCIENTIFIC

Address:1 REAGENT LANE

City:FAIR LAWN

State:NJ

ZIP:07410

Country:US

Info Phone Num:201-796-7100

Emergency Phone Num:800-424-9300 (CHEMTREC)

CA

GE:1B464

=== Contractor Identification ===

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 Name:SULFURIC ACID (SARA 302/313) (CERCLA) LD50 (ORAL RAT): 2140  
MG/KG

CAS:7664-93-9

RTECS #:WS5600000

Fraction by Wt: 95-98%

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3/3 STEL

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingre

d Name:SUP DAT: CHLORINE TRIFLUORIDE, CHLOROSULFONIC ACID, CUPROUS NITRIDE, DIISOBUTYLENE, EPICHLOROHYDRIN, ETHYLENE (ING 3)  
RTECS #:9999999ZZ

Ingred Name:ING 2: CYANOHYDRIN, ETHYLENE DIAMINE, ETHYLENE GLYCOL, ETHYLENIMINE, FULMINATES, OTHER ACIDS, IODINE (ING 4)  
RTECS #:9999999ZZ

Ingred Name:ING 3: HEPTAFLUORIDE, METALS, ISOPRENE, LITHIUM SILICIDE, MERCURIC NITRIDE, MESITYL OXIDE, P-NITROTOLUENE, (ING 5)  
RTECS #:9999999ZZ

Ingred Name:ING 4: PENTASILVER TRIHYD.  
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC: REMOVE FROM EXPOS TO FRESH AIR IMMED. IF NOT BRTHG, GIVE ARTF RESP. IF BRTHG IS DFCLT, GIVE (ING 7)  
RTECS #:9999999ZZ

Ingred Name:ING 6: OXYGEN. NOTES TO MD: TREAT SYMPTOMATICALLY AND SUPPORTIVELY. NONE REPORTED.  
RTECS #:9999999ZZ

Ingred Name:EYE PROTECTION: AND FULL LENGTH FACESHIELD .  
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:SEE INGREDIENT 1.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: EYES: CAUSES SEV BURNS. MAY CAUSE IRREVERSIBLE EYE INJURY. SKIN: CAUSES BURNS. INGEST: MAY CAUSE SEV & PERM DMG TO DIGESTIVE TRACT. CAUSES GI TRACT BURNS. INHAL: HARMFUL IF INHALED. MAY CAUSE SEV IRRIT OF RESP TRACT W/SORE THROAT, COUGHING, SHORTNESS OF BRTH & DELAYED LUNG EDEMA. MAY CAUSE MUC (EFTS OF OVEREXP)  
Explanation of Carcinogenicity:SULFURIC ACID: IARC MONO ON EVAL OF CARCIN RISK OF CHEMICALS TO MAN, VOL 54, PG 41, 1992: GROUP 1. ANIMAL: PULM IRRIT.  
Effects of Overexposure:HLTH HAZ: MEMB BURNS. CHRONIC: PRLNG/RPTD INHAL MAY CAUSE NOSEBLEEDS, NASAL CONGESTION, EROSION OF TEETH, PERFORATION OF NASAL SEPTUM, CHEST PAIN & BRONCHITIS. PRLNG/RPTD EYE CONT MAY CAUSE CONJUNCTIV ITIS.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: FLUSH W

/PLENTRY OF WATER FOR AT LEAST 15 MIN, OCCAS  
LIFTING UPPER & LOWER LIDS. GET MED AID IMMED. SKIN: GET MED AID  
IMMED. FLUSH SKIN W/PLENTRY OF SOAP & WATER FOR AT LEAST 15 MIN  
WHILE REMOVING CONTAM CLTHG & SHOES. SPEEDY ACTION IS CRITICAL!  
INGEST: DO NOT INDUCE VOMIT. IF VICTIM IS CONSCIOUS & ALERT, GIVE  
2-4 CUPFULS OF MILK/WATER. GET MED AID IMMED. INHAL: GET MED AID  
IMMED. (ING 6)

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

Extinguishing Media:DO

NOT USE WATER DIRECTLY ON FIRE. USE WATER SPRAY  
TO COOL FIRE-EXPOSED CONTAINERS. USE DRY CHEMICAL TO FIGHT FIRE.

Fire Fighting Procedures:WEAR NIOSH APPROVED SCBA & FULL PROTECTIVE  
EQUIPMENT .

Unusual Fire/Explosion Hazard:CONTACT WITH WATER CAN CAUSE VIOLENT  
LIBERATION OF HEAT AND SPLATTERING OF THE MATERIAL.

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

Spill Release Procedures:CLEAN UP SPILLS IMMEDIATELY, OBSERVING  
PRECAUTIONS IN THE PROTECTIVE EQUIPME  
NT SECTION. COVER WITH SAND,  
DRY LIME OR SODA ASH AND PLACE IN A CLOSED CONTAINER FOR DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:DO NOT GET IN EYES, ON SKIN, OR ON  
CLOTHING. KEEP CONTAINER TIGHTLY CLOSED. DO NOT ALLOW CONTACT WITH  
WATER. USE ONLY IN A CHEMICAL FUME HOOD.

Other Precautions:DO NOT STORE NEAR COMBUSTIBLE MATERIALS. KEEP  
CONTAINER CLOSED WHEN NOT I  
N USE. STORE IN A DRY AREA. STORE IN A  
COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE SUBSTANCES.  
DO NOT STORE NEAR ALK ALINE SUBSTANCES.

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

Respiratory Protection:FOLLOW THE OSHA RESPIRATOR REGULATIONS FOUND IN  
29CFR 1910.134. ALWAYS USE A NIOSH APPROVED RESPIRATOR WHEN  
NECESSARY.

Ventilation:USE PROCESS ENCLOSURE, LOC EXHAUST VENT/OTHER ENGINEERING  
CTLS TO CONTROL AIRBORNE LEVELS BELOW REC EXPOS LIM

TS.

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:ANSI APPRVD CHEM WORKERS GOGG (ING 8)

Other Protective Equipment:ANSI APPROVED EMERGENCY EYEWASH AND DELUGE  
SHOWER . WEAR APPROP PROT CLOTHING TO MINIMIZE CONTACT W/SKIN.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. REMOVE  
CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

Supplemental Safety and Health

PH: 0.3 (1N SOLN). MATLS TO AVOID: ACROLEIN, ACRYLONITRILE, ALCOHOLS +  
HYDROGEN PEROXIDE, ALLYL ALCOHOL, ALLYL CHLORIDE,

2-AMINOETHANOL,

AMMONIUM HYDROXIDE, AMMONIUM TRIPERCHROMATE, ANILINE, BROMATES +  
METALS, BROMINE PENTAFLUORIDE, N-BUTYRALDEHYDE, CARBIDES, CESIUM  
ACETYLENE CARBIDE, CHLORATES, (ING 2)

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

Boiling Pt:B.P. Text:554F,290C

Melt/Freeze Pt:M.P/F.P Text:50.6F,10.3C

Vapor Pres: