

FISHER SCIENTIFIC CHEMICAL DIV -- ETHYL ETHER, E1381 -- 6810-00-264-6607

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

Product ID:ETHYL ETHER, E1381

MSDS Date:03/03/1994

FSC:6810

NIIN:00-264-6607

MSDS Number: CDVHL

=== 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

Emergency Phone Num:800-424

-9300 (CHEMTREC)

CAGE: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:ETHANE, 1,'1-OXYBIS-; (ETHYL ETHER) (CERCLA)

CAS:60-29-7

RTECS #:KI5775000

Fraction by Wt: 100%

OSHA PEL:400 PPM

ACGIH TLV:400PPM/500STEL

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

Ingred Name:EFTS

OF OVEREXP: ALBUMIN MAY APPEAR IN URINE & POLYCYTHEMIA
IN BLOOD. 19,000 PPM IS CONSIDERED LOWEST ANESTH- (ING 3)
RTECS #:9999999ZZ

Ingred Name:ING 2: PRODUCING DOSE. THEREFORE, THERE IS A LGE MARGIN OF
SFTY BETWEEN CONCS CAUSING NASAL IRRIT & THOSE CAUSING(ING 4)
RTECS #:9999999ZZ

Ingred Name:ING 3: ANESTH, PERM DMG/DEATH. DEATH HAS BEEN REPORTED FROM
RESP PARAL. SKIN: MAY CAUSE IRRIT BY DEFAT & DRYING (ING 5)
RTECS #:9999999ZZ

Ingred Name:ING 4: OF SKIN. ABSORPTION THRU HUMAN SKI
N IS NOT GREAT
ENOUGH TO CAUSE DELETERIOUS EFT. EYES: VAPS MAY CAUSE (ING 6)
RTECS #:9999999ZZ

Ingred Name:ING 5: IRRIT. UNDILUTED LIQ MAY CAUSE PAINFUL INFLAMM OF
TRANSITORY NATURE. EXAMINATION OF HUMAN EYE AFTER A (ING 7)
RTECS #:9999999ZZ

Ingred Name:ING 6: GENEROUS SPLASH SHOWED DULLING OF CORNEA. INGEST:
MAY CAUSE CNS DEPRESS W/NAUS, VOMIT, DROW, & DIZZ. (ING 8)
RTECS #:9999999ZZ

Ingred Name:ING 7: FATAL AMT IS ESTIMATED AT 1-2 OZ. SYMPS MAY BE
SIMILAR TO ETHANOL INTOXICA
TION EXCEPT THAT ONSET IS MORE (ING 9)
RTECS #:9999999ZZ

Ingred Name:ING 8: RAPID & DURATION IS SHORTER. BECAUSE OF ITS
VOLATILITY, STOM MAY BECOME PROMPTLY DISTENDED WHICH MAY (ING 10)
RTECS #:9999999ZZ

Ingred Name:ING 9: HINDER BRTHG. CHRONIC: INHAL: RPTD/PRLNG EXPOS MAY
CAUSE ANOREXIA, EXHAUSTION, HDCH, DROW, DIZZ, (ING 11)
RTECS #:9999999ZZ

Ingred Name:ING 10: EXCITATION, & PSYCHIC DISTURB. DMG TO LIVER &
KIDNEY MAY OCCUR. TOLERANCE MAY BE ACQUIRED THRU RPTD (ING 12)
RTECS #:9

999999ZZ

Ingred Name:ING 11: EXPOS. SKIN: RPTD/PRLNG EXPOS MAY CAUSE DERM
W/CRACKING & DRYING OF SKIN DUE TO EXTRACTION OF OILS. (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12: EYES: RPTD/PRLNG EXPOS MAY CAUSE CONJ. INGEST: RPTD
DRINKING OF ETHER HAS BEEN REPORTED RESULTING IN (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13: THE DEVELOPMENT OF THE "ETHER HABIT" AND GENERAL
DEBILITY.
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC: LIFTING UPPER & LOWER LIDS, UNTIL NO
EVIDENCE OF CH
EM REMAINS (APPROX 15-20 MIN). GET MED ATTN (ING 16)
RTECS #:9999999ZZ

Ingred Name:ING 15: IMMED. INGEST: ESTABLISH AIRWAY & MAINTAIN RESP.
REMOVE VOLAT ANESTH BY FORCED VENT. GET MED ATTN IMMED.(ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16: NO SPECIFIC ANTIDOTE. TREAT SYMPTOMATICALLY AND
SUPPORTIVELY.
RTECS #:9999999ZZ

Ingred Name:SUP DAT: HOSE HOLDER/MONITOR NOZZ; IF THIS IS IMPOSS,
WITHDRAW FROM AREA & LET FIRE BURN. WITHDRAW IMMED IN CASE(ING 19)
RTECS #:9999999ZZ

Ingred Name
:ING 18: RISING SOUND FROM VENTING SFTY DEVICE/ANY
DISCOLORATION OF TANK DUE TO FIRE. ISOLATE FOR 1/2 MILE IN ALL(ING
20)
RTECS #:9999999ZZ

Ingred Name:ING 19: DIRECTIONS IF TANK, RAIL CAR/TANK TRUCK IS INVOLVED
IN FIRE. EXTING ONLY IF FLOW CAN BE STOPPED; USE (ING 21)
RTECS #:9999999ZZ

Ingred Name:ING 20: WATER IN FLOODING QTYS AS FOG. SOLID STREAMS MAY
SPREAD FIRE. COOL CONTRS W/FLOODING AMTS OF WATER, (ING 22)
RTECS #:9999999ZZ

Ingred Name:ING 21: APPLY FROM AS FAR DIST AS

POSS. AVOID BRTHG TOX

VAPS. KEEP UPWIND. EVACUATE TO RADIUS OF 1500 FEET FOR (ING 23)

RTECS #:9999999ZZ

Inged Name:ING 22: UNCONTROLLABLE FIRES. CONSIDER AVACUATION OF
DOWNWIND AREA IF MATL IS LEAKING. WATER MAY BE INEFFECTIVE.

RTECS #:9999999ZZ

Inged Name:EXPLO HAZ: EXPLO PEROXIDES IF EXPOSED TO AIR/LIGHT FOR LONG
PERIODS OF TIME. VAPS ARE HVR/AIR & MAY TRAVEL A (ING 25)

RTECS #:9999999ZZ

Inged Name:ING 24: CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND
FLASHBACK.

RTECS #

:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:ACUTE: INHAL: IRRIT/NARCOTIC. 19,000

PPM IMMED DANGEROUS TO LIFE/HLTH. VAPS MAY CAUSE IRRIT TO RESP
TRACT. HUMAN ODOR DETECTION MAY BEGIN @ 0.7 PPM. NASAL IRRIT MAY
OCCUR @ 200 PPM. HIGHER CONCS MAY B EGIN TO PRDC

E CNS DEPRESS

W/DROW, DIZZ,NAUS, HDCH, STUPOR, & UNCON. HOWEVER, CONCS OF 7000
PPM HAVE (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: BEEN TOLERATED BY SOME WORKERS W/OUT
UNTOWARD EFTS. INITIAL SYMPS MAY INCL VOMIT, PALLOR, EXCITEMENT TO
DROW, LOWERING OF PULSE & BODY TEMP, IRREG RESP, MUSC RELAXATION, &
EXCESS SALIVATION. TEMPORARY AFTER EFTS OF EXPOS MAY INCLVOMIT,
SALIVATION, IRRIT OF RESP PASSAGES, HDCH, & DEPRESS/EXC

ITATION.

(ING 2)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INHAL: REMOVE TO FRESH AIR IMMED. IF BRTHG HAS STOPPED,
PERFORM ARTF RESP. KEEP WARM & AT REST. TREAT SYMPTOMATICALLY &
SUPPORTIVELY. GET MED ATTN IMMED. SKIN: REMOVE CONTAM CLTHG & SHOES
IMMED. WASH AFFECTED AREA W/SOAP/MILD DETERGENT & LGE AMTS OF
WATER UNTIL NO EVIDENCE OF CHEM REMAINS (APPROX 15-20 MIN). GET

MED
ATTN IMMED. EYE: WASH IMMED W/LGE ATMS OF WATER/NORM SALINE, OCCAS
(ING 15)

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

Flash Point Method:CC
Flash Point:-49F,-45C
Lower Limits:1.9%
Upper Limits:48%
Extinguishing Media:DRY CHEM, CARBON DIOXIDE, WATER
SPRAY/ALCOHOL-RESIST FOAM. FOR LARGER FIRES, USE WATER SPRAY,
FOG/ALCOHOL-RESIST FOAM.
Fire Fighting Procedures:WEAR NIOSH APPRVD SCBA & FULL PROT EQUIP .
MOVE CONTR FROMFIRE AREA IF YOU CAN DO IT
W/OUT RISK. APPLY COOLING
WATER TO SIDES OF CONTRS THAT ARE (SUP DAT)
Unusual Fire/Explosion Hazard:DANGEROUS FIRE & EXPLO HAZ WHEN EXPOSED
TO HEAT/FLAME. MAY ACCUM STATIC ELEC CHARGES THAT RSLT IN IGNIT OF
ITS VAPS. VAP-AIR MIXS ARE EXPLO. MAY FORM (ING 24)

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

Spill Release Procedures:SHUT OFF IGNIT SOURCES. STOP LEAK IF YOU CAN
DO IT W/OUT RISK. USE WATER SPRAY TO REDUCE VAPS. FOR SML SPILLS,
TAKE UP W/SAND/
OTHER ABSORB MATL & PLACE INTO CONTRS FOR LATER
DISP. FOR LARGER SPILLS, D IKE FAR AHEAD OF SPILL FOR LATER DISP.
(SUP DAT)
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:PROT AGAINST PHYSICAL DMG. DETACHED
OUTSIDE STOR IS PREF. INSIDE STOR SHOULD BE IN STD FLAM LIQS STOR
ROOM/CABINET. ISOLATE FROM OTHER COMBUST MATLS.
Other Precautions:AVOID DIRECT SUNLIGHT. PROT AGAINST ST
ATIC ELEC &
LIGHTNING. FOR LGE QTY STOR ROOMS, PROT W/AUTOMATIC SPRINKLER SYS &
TOTAL FLOODING CARBON DIOXIDE SYS. FOR MORE SPECIFIC INFORMATION ON
HANDLING/STORA GE PRECAUTIONS, CONTACT NEHC .

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

Respiratory Protection:USE NIOSH APPROVED RESPIRATOR APPROPRIATE FOR
EXPOSURE OF CONCERN . FOR MORE SPECIFIC INFORMATION ON RESPIRATORY
PROTECTION, CONTACT NEHC .
Ventilation:PROVIDE GENERAL DILUTION VENTILATION TO M

EET PUBLISHED

EXPOSURE LIMITS. VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.

Protective Gloves:IMPERVIOUS GLOVES .

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGLES .

Other Protective Equipment:EMERGENCY EYEWASH & DELUGE SHOWER MEETING ANSI DESIGN CRITERIA . WEAR IMPERVIOUS CLOTHING TO PREVENT SKIN CONTACT.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

CNDTNS TO AVOID: SOMETIMES FORM WHICH MAY EXPLODE SPONT/WHEN HEATED.

SPILL PROC: NO SMKNG

, FLAMES/FLARES IN HAZ AREA. KEEP UNNEC PEOPLE

AWAY; ISOLATE HAZ AREA & DENY ENTRY. FIRE FIGHT PROC: EXPOSED TO FLAMES UNTIL WELL AFTER FIRE IS OUT. STAY AWAY FROM ENDS OF TANKS. FOR MASSIVE FIRE IN CARGO AREA, USE UNMANNED(ING 18)

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

Boiling Pt:B.P. Text:95.0F,35.0C

Melt/Freeze Pt:M.P/F.P Text:-190F,-123C

Vapor Pres:442

Vapor Density:2.6

Spec Gravity:0.7

Evaporation Rate & Reference:37.5 (BUTYL ACETATE=1)

Solub

ility in Water:6.9%

Appearance and Odor:COLORLESS, VOLATILE, MOBILE LIQUID W/ETHEREAL ODOR & BURNING SWEET TASTE

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

CHLORINE, IODINE, LITHIUM, NITRIC ACID, OXYGEN, STRONG OXIDIZERS, HALOGENS. FOR MORE SPECIFIC INFO CONT NEHC .

Stability Condition to Avoid:IN PRESENCE OF OXYGEN/ON LONG

STANDING/WHEN CONTAINED IN BOTTLES & EXPOSED TO SUNLIGHT, UNSTABLE PEROXIDES (SUP DAT)

H

azardous Decomposition Products:THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE TOXIC OXIDES OF CARBON.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS .

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implice

d, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.