

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:800-424-93

00 (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 SKIN I
S 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 INTOXICATIO
N 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 #:9999

999ZZ

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 CHEM
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:IN
G 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 POS

S. AVOID BRTHG TOX
VAPS. KEEP UPWIND. EVACUATE TO RADIUS OF 1500 FEET FOR (ING 23)
RTECS #:9999999ZZ

Ingrid Name:ING 22: UNCONTROLLABLE FIRES. CONSIDER AVACUATION OF
DOWNWIND AREA IF MATL IS LEAKING. WATER MAY BE INEFFECTIVE.
RTECS #:9999999ZZ

Ingrid 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

Ingrid Name:ING 24: CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND
FLASHBACK.
RTECS #:99
99999ZZ

===== 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 PRDCE C
NS 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/EXCITA
TION.
(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 ME

D

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 FROM FIRE AREA IF YOU CAN DO IT W/O

UT 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/OTH

ER 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 STATI

C 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 MEET

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, F

LAMES/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)

Solubili

ty 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)

Haza

rdous 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 .

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