

FISHER SCIENTIFIC -- 1,2-DICHLOROETHANE, E-175 -- 6810-00-003-3043

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

Product ID:1,2-DICHLOROETHANE, E-175

MSDS Date:12/07/1994

FSC:6810

NIIN:00-003-3043

MSDS Number: CDWZB

=== 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(CHEMTR
EC)

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, 1,2-DICHLORO-; (1,2-DICHLOROETHANE) (SARA 313)
(CERCLA)

CAS:107-06-2

RTECS #:KI0525000

Fraction by Wt: 100%

OSHA PEL:50 PPM

ACGIH TLV:10 PPM

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

Ingred Name:SU

PDAT:AWAY FROM ENDS OF TANKS. FOR MASSIVE FIRE IN CARGO
AREA, USE UNMANNED HOSE HOLDER/MONITOR NOZZ; IF THIS IS(ING 3)
RTECS #:9999999ZZ

Inged Name:ING 2:IMPOSS, W/DRAW FROM AREA & LET FIRE BURN. W/DRAW
IMMED IN CASE OF RISING SOUND FROM VENTING SFTY DEVICE/ANY(ING 4)
RTECS #:9999999ZZ

Inged Name:ING 3:DISCOLORATION OF TANK DUE TO FIRE. ISOLATE FOR 1/2
MILE IN ALL DIRECTIONS IF TANK, RAIL CAR/TANK TRUCK IS (ING 5)
RTECS #:9999999ZZ

Inged Name:ING 4:INVOLVED IN FIRE. EXTING ONLY
IF FLOW CAN BE STOPPED;
USE FLOODING AMTS OF WATER AS A FOG, SOLID STREAMS (ING 6)
RTECS #:9999999ZZ

Inged Name:ING 5:MAY BE INEFFECTIVE. KEEP UPWIND.
RTECS #:9999999ZZ

Inged Name:EFTS OF OVEREXP:MAY CAUSE BURNING SENSATION IN MOUTH,
THROAT & STOM. SYSTEMIC TOX, INCL CNS DEPRESS, HEPATOTOX & (ING 8)
RTECS #:9999999ZZ

Inged Name:ING 7:NEPHROTOXICITY, MAY OCCUR AS DETAILED IN ACUTE INHAL.
INGEST OF 5 ML MAY BE LETHAL TO MAN. CHRONIC:INHAL: (ING 9)
RTECS #:9999999ZZ

Inged Name:
ING 8:EXPOS TO 10-37 PPM HAS CAUSED NAUS, VOMIT, DIZZ &
ADVERSE NERV SYS & LIVER EFTS. RPTD/PRLNG EXPOS MAY ALSO(ING 10)
RTECS #:9999999ZZ

Inged Name:ING 9:RSLT IN IRRIT OF MUC MEMBS, ACUTE BRONCH INFLAMM,
LOSS OF APPETITE, WT LOSS, ANEMIA, CONSTIP, INSOM, (ING 11)
RTECS #:9999999ZZ

Inged Name:ING 10:EPIGASTRIC DISTRESS, NYSTAGMUS, LIVER & KIDNEY DMG,
ELEVATED UREBILINOGEN & CARD PAIN. NEUROLOGIC EFTS (ING 12)
RTECS #:9999999ZZ

Inged Name:ING 11:MAY OCCUR. DEATH MAY RSLT FROM R

ESP CIRCULATORY,
HEPATIC/RENAL FAILURE. REPRO EFTS HAVE BEEN REPORTED IN (ING 13)
RTECS #:9999999ZZ

Ingred Name:ING 12:ANIMALS. SKIN:RPTD/PRLNG CONT W/LIQ CAN PRDCE DRY,
SCALY, FISSURED DERM DUE TO DEFAT ACTION. SYSTEMIC (ING 14)
RTECS #:9999999ZZ

Ingred Name:ING 13:EFTS MAY ENSUE. ADMIN TO MICE BY SKIN APPLICATION
RESULTED IN STATISTICALLY SIGNIFICANT INCR IN INCIDENCE(ING 15)
RTECS #:9999999ZZ

Ingred Name:ING 14:OF NEOPLASTIC TUMORS OF RESP TRACT & SKIN.
EYES:RPTD/PRLNG CONT
MAY CAUSE CONJ. INGEST:MAY CAUSE SYSTEMIC(ING
16)
RTECS #:9999999ZZ

Ingred Name:ING 15:EFTS. IN MICE, IT PRDCD BENIGN & MALIGNANT TUMORS OF
LUNG & MALIGNANT LYMPHOMAS IN ANIMALS OF BOTH SEXES;(ING 17)
RTECS #:9999999ZZ

Ingred Name:ING 16:HEPATOCELLULAR CARCINOMAS IN MALES & MAMMARY &
UTERINE ADENOCARCINOMAS IN FEMALES. IN RATS, IT PRDCD (ING 18)
RTECS #:9999999ZZ

Ingred Name:ING 17:CARCINOMAS OF FORESTOMACH IN MALES, BENIGN &
MALIGNANT MAMMARY TUMORS IN FEMALES & HEMANGIOSARC
OMAS IN (ING 19)
RTECS #:9999999ZZ

Ingred Name:ING 18:ANIMALS OF BOTH SEXES.
RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC:(MINS). GET MED ATTN. INGEST:IF VOMIT OCCURS,
KEEP HEAD LOWER THAN HIPS TO HELP PVNT ASPIR. TREAT (ING 21)
RTECS #:9999999ZZ

Ingred Name:ING 20:SYMPTOMATICALLY & SUPPORTIVELY. GET MEDICAL
ATTENTION.
RTECS #:9999999ZZ

Ingred Name:OTHER PREC:RUPTURE & TRAVEL A CONSIDERABLE DISTANCE IN HEAT
OF FIRE.
RTECS #:9999999ZZ

Ingred Name:RESP PROT:SUPPLIED AIR RESP W/FULL

FACEPIECE OPERATED IN
PRESS-DEMAND/OTHER POS-PRESS MODE IN COMBINATION W/ (ING 24)
RTECS #:9999999ZZ

Ingred Name:ING 23:AUXILIARY SCBA OPERATED IN PRESS-DEMAND/OTHER
POS-PRESS MODE. ESCAPE-ANY AIR-PURIFYING, FULL-FACEPIECE (ING 25)
RTECS #:9999999ZZ

Ingred Name:ING 24:RESP (GAS MASK) W/CHIN-STYLE, FRONT- OR BACK-MOUNTED
ORGANIC VAPOR CANISTER; ANY APPROP ESCAPE-TYPE, SCBA.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:LD
50:(ORAL,RAT) 670 MG/KG.

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

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

Health Hazards Acute and Chronic:ACUTE:INHAL:MAY CAUSE IRRIT OF UPPER
RESP TRACT, HDCH, NAUS & VOMIT, DIARR & INTEST CRAMPS. CNS EFTS
INCL LT HEAD, WEAK, ANXIETY, DROW, DELIRIUM, COLLAPSE & COMA MAY
APPEAR W/IN SEVERAL HRS AFTER EXPO S. THERE MAY BE QUIESCENT PERIOD
& THEN, IF INDIVIDUAL SURVIVES, OLIGURIA, JAUN & ANEMIA MAY RSLT.
(EFTS OF
OVEREXP)

Explanation of Carcinogenicity:ETHYLENE DICHLORIDE:IARC MONO, SUPP, VOL
7, PG 56, 1987:GRP 2B. NTP 7TH ANNUAL RPT ON CARCINS, 1994:ANTIC TO
BE (SUPDAT)

Effects of Overexposure:HLTH HAZ:DEATH MAY OCCUR FROM RESP/CARD ARREST.
SKIN:LIQ MAY CAUSE IRRIT. PRLNG CONT MAY RSLT IN SEV IRRIT, MOD
EDEMA & NECROSIS. MAY BE ABSORBED & CAUSE SYSTEMIC TOX. EYE:HIGH
VAP CONCS/LIQ MAY CAUSE IMMED DISCOMFORT, LACRIM, HYPEREMIA OFCONJ
& CORNEAL INJURY, WHICH MAY RETURN TO NORMAL

W/IN DAY/TWO. INGEST:
(ING 7)

Medical Cond Aggravated by Exposure:PERSONS W/BRONCHITIS, ASTHMA,
KIDNEY, LIVER, BLOOD, HEART OR CIRCULATORY DISORDERS ARE AT
INCREASED RISK FROM EXPOSURE.

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

First Aid:INHAL:REMOVE TO FRESH AIR IMMED. PERFORM ARTF RESP IF NEC.
KEEP PERS WARM & AT REST. TREAT SYMPTOMATICALLY & SUPPORTIVELY. GET
MED ATTN. SKIN:REMOVE CONTAM CLTHG & SHOES IMMED. WASH W/SOAP &
WATER UNT IL NO EV

ID OF CHEM REMAINS (AT LST 15-20 MINS). GET MED

ATTN. EYES:WASH IMMED W/LG AMTS OF WATER/NORMAL SALINE, OCCAS
LIFTING UPPER & LOWER LIDS, UNTIL NO EVID OF CHEM REMAINS (AT LST
15-20 (ING 20)

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

Flash Point Method:CC

Flash Point:56.0F,13.3C

Lower Limits:6.2%

Upper Limits:16%

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR
REGULAR FOAM. FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR
FOAM.

Fi

Fire Fighting Procedures:USE NIOSH APPRVD SCBA & FULL PROT EQUIP . MOVE
CNTNR FROM FIRE AREA IF W/OUT RISK. APPLY COOLING WATER TO SIDES OF
CNTNRS EXPOS TO FLAMES UNTIL (SUPDAT)

Unusual Fire/Explosion Hazard:DANGEROUS FIRE HAZ WHEN EXPOS TO HEAT,
FLAME/OXIDIZERS. VAP-AIR MIXTS ARE EXPLO ABOVE FLASH POINT. VAPS
MAY TRAVEL CONSIDERABLE DIST TO SOURCE OF IGNIT (SUPDAT)

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

Spill Release Procedures:SHUT OFF IGNIT SOURCES

; NO FLARES,

SMOKING/FLAMES IN HAZ AREA. STOP LEAK IF W/OUT RISK. WATER SPRAY
MAY REDUCE VAP; BUT MAY NOT PVNT IGNIT IN CLSD SPACES. SM

SPIILLS:TAKE UP W/SAND OR OTHER NONCOMBUST ABSORB MATL & PLACE INTO
CNTNRS FOR LATER (SUPDAT)

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:OBSERVE ALL FED, STATE & LOC REGS WHEN
STORING THIS SUBSTANCE. STORE AWAY FROM INCOMPAT SUBSTANC

ES. PROT

AGAINST PHYSICAL DMG. FLAMM LIQ, POISON.

Other Precautions:OUTSIDE/DETACHED STOR IS PREF. INSIDE STORE SHOULD BE
IN STD FLAMM LIQS STOR ROOM/CABINET. SEPARATE FROM OXIDIZING MATLS.

VAPS MAY BE EXPLO & POIS; DO NOT ALLOW UNNEC PERS IN AREA. DO NOT
OVERHEAT CNT NRS; CNTNRS MAY VIOLENTLY (ING 22)

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

Respiratory Protection:SPECIFIC RESP SELECTED MUST BE BASED ON CONTAM
LEVELS FOUND IN WORK PLACE, MUST NOT

EXCEED WORKING LIMITS OF RESP &
BE NIOSH APPROVED: AT ANY DETECTABLE CONCENTRATION-ANY SCBA WITH FULL-FACEPIECE
OPERATED IN PRESSURE-DEMAND/OTHER POSITIVE-PRESSURE MODE; ANY (INGRESS 23)
Ventilation: PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION TO
MEET PELLS. VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.
Protective Gloves: IMPERVIOUS GLOVES .
Eye Protection: ANSI APPROVED CHEM WORKERS GOGGLES & (SUPPLY) (S) (S)
Other Protective Equipment: ANSI APPROVED EYE WASH FOUNTAIN & DELUGE
SHOWER . APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING
& EQUIPMENT TO PREVENT CONTACT
WITH SUBSTANCE.
Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health
EXPLOSION HAZARD: & FLASH BACK. EXPLANATION OF CARCINOGENICITY: CARCINOGEN. ANIMAL: GI, SKIN,
LUNGS. SPILL PROCEDURE: DISPERSE. LARGE SPILLS: DIKE FAR AHEAD OF SPILL FOR
LATER DISPERSION. ISOLATE HAZARD AREA & DENY ENTRY. STAY UPWIND. RQ: 5000
LBS. FOR MORE INFORMATION CONTACT NEHC. EYE PROTECTION: FULL LENGTH FACESHIELD .
FIRE FIGHT PROCEDURE: WELL AFTER FIRE IS OUT. STAY (INGRESS 2)

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

Boiling Point: B.P. Text: 183F, 84C
Melt/Freeze Point: M.P/F.P Text: -32F, -36C
Vapor Pressure: 87 @ 25C
Vapor Density: 3.35
Specific Gravity: 1.256
Evaporation Rate & Reference: 1.3 (CCL*4=1)
Solubility in Water: 0.8%
Appearance and Odor: CLEAR, COLORLESS, OILY LIQUID WITH PLEASANT
CHLOROFORM-LIKE ODOR & SWEET TASTE.

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

Stability Indicator/Materials to Avoid: YES
ALUMINUM, LIQUID AMMONIA, STRONG CAUSTICS, METALS, STRONG OXIDIZERS
. FOR
COMPLETE LIST OF MATERIALS TO AVOID CONTACT NEHC .
Stability Condition to Avoid: AVOID CONTACT WITH HEAT, SPARKS, FLAMES OR
OTHER SOURCES OF IGNITION.
Hazardous Decomposition Products: THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE
HIGHLY TOXIC FUMES OF PHOSGENE. TOXIC & CORROSIVE FUMES OF CHLORIDES &
OXIDES OF CARBON.

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

Waste Disposal Methods: OBSERVE ALL FEDERAL, STATE & LOCAL REGULATIONS WHEN DISPOSING OF
THIS SUBSTANCE. MATERIALS WHICH CONTAIN 1,2-DICHLOR

OETHANE AT/ABOVE THE

TCLP REGULATORY LEVEL MEET THE EPA TOX CHARACTERISTICS & MUST BE DISPOSED OF
IN ACCORDANCE WITH 40 CFR PART 262. EPA HAZARDOUS WASTE NUMBER: D028.

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 implied, 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.