

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(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, 1,2-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:SUPDA

T: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 RESP

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 MA  
Y 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 & HEMANGIOSARCOMA  
S 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 FA

CEPIECE 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:LD50:  
(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 OV  
EREXP)  
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/I  
N 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 EVID

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.  
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; N  
O 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  
SPILLS: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 SUBSTANCES.  
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 EX

CEED WORKING LIMS OF RESP &  
BE NIOSH APPRVD: AT ANY DETECTABLE CONC-ANY SCBA W/FULL-FACEPIECE  
OPERATED IN PRESS-DE MAND/OTHER POS-PRESS MODE; ANY (ING 23)  
Ventilation:PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION TO  
MEET PELS. VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.  
Protective Gloves:IMPERVIOUS GLOVES .  
Eye Protection:ANSI APPRVD CHEM WORKERS GOGGS &(SUPDAT)  
Other Protective Equipment:ANSI APPRVD EYE WASH FOUNTAIN & DELUGE  
SHOWER . APPROP PROT (IMPERVIOUS) CLTHG &  
EQUIP TO PVNT CONT  
W/SUBSTANCE.  
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.  
Supplemental Safety and Health  
EXPLO HAZ:& FLASH BACK. EXPLAN OF CARCIN:CARCIN. ANIMAL:GI, SKIN,  
LUNGS. SPILL PROC:DISP. LGR SPILLS:DIKE FAR AHEAD OF SPILL FOR  
LATER DISP. ISOLATE HAZ AREA & DENY ENTRY. STAY UPWIND. RQ:5000  
LBS. FO R MORE INFO CONT NEHC. EYE PROT:FULL LENGTH FACESHIELD .  
FIRE FIGHT PROC:WELL AFTER FIRE IS OUT. STAY(ING 2)

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

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

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

Stability Indicator/Materials to Avoid:YES  
ALUMINUM, LIQ AMMONIA, STRONG CAUSTICS, METALS, STRONG OXIDIZERS. F  
OR  
COMPLETE LIST OF MATLS TO AVOID CONT NEHC .  
Stability Condition to Avoid:AVOID CONTACT W/HEAT, SPARKS, FLAMES OR  
OTHER SOURCES OF IGNITION.  
Hazardous Decomposition Products:THERMAL DECOMP PRODUCTS MAY INCL  
HIGHLY TOXIC FUMES OF PHOSGENE. TOXIC & CORR FUMES OF CHLORIDES &  
OXIDES OF CARBON.

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

Waste Disposal Methods:OBSERVE ALL FED, STATE & LOC REGS WHEN DISP OF  
THIS SUBSTANCE. MATLS WHICH CNTN 1,2-DICHLOROET

HANE AT/ABOVE THE

TCLP REGULATORY LEVEL MEET THE EPA TOX CHARACT & MUST BE DISP OF  
I/A/W 40 CFR PART 262. EPA HAZ WASTE NUMBER:D028.

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