



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Occidental Chemical Corporation**

**5005 LBJ Freeway**

**P.O. Box 809050**

**Dallas, Texas 75380-9050**

**24 HOUR EMERGENCY TELEPHONE:**

**1-800-733-3665 or 1-972-404-3228 (U.S.);**

**32.3.575.55.55 (Europe);**

**1800-033-111 (Australia)**

**TO REQUEST AN MSDS:**

**MSDS@oxy.com or 1-972-404-3245**

**CUSTOMER SERVICE:**

**1-800-752-5151 or 1-972-404-3700**

**MSDS NUMBER:** M5855

**SUBSTANCE:** ETHYLENE DICHLORIDE FINISHED GRADE

**SYNONYMS:**

EDC; 1,2-Dichloroethane; EDC/Cl<sub>2</sub> Equivalent

**PRODUCT USE:** process chemical

**REVISION DATE:** Dec 14 2005

### 2. HAZARDS IDENTIFICATION

**NFPA RATINGS (SCALE 0-4):** HEALTH=2 FIRE=3 REACTIVITY=0

**HMIS RATINGS (SCALE 0-4):** HEALTH=2\* FLAMMABILITY=3 REACTIVITY=0

#### EMERGENCY OVERVIEW:

**COLOR:** colorless

**PHYSICAL FORM:** liquid

**ODOR:** mildly sweet odor

**SIGNAL WORD:** WARNING

**MAJOR HEALTH HAZARDS:** HARMFUL OR FATAL IF SWALLOWED. MAY BE IRRITATING TO RESPIRATORY TRACT, SKIN AND EYES. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS. MAY CAUSE KIDNEY AND LIVER DAMAGE. MAY CAUSE CANCER BASED ON ANIMAL DATA.

**PHYSICAL HAZARDS:** Flammable liquid and vapor.

**PRECAUTIONARY STATEMENTS:** Do not taste or swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Keep away from all ignition sources. Avoid exposure to strong UV light which generates phosgene. Keep container tightly closed. Use only with adequate ventilation.

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:**

**SHORT TERM EXPOSURE:** irritation, central nervous system effects, irregular heartbeat, absorption will occur

**LONG TERM EXPOSURE:** irritation, central nervous system effects, kidney damage, liver damage, cancer

**SKIN CONTACT:**

**SHORT TERM EXPOSURE:** irritation, central nervous system effects, absorption will occur

**LONG TERM EXPOSURE:** dermatitis, central nervous system effects

**EYE CONTACT:**

**SHORT TERM EXPOSURE:** irritation, absorption will occur, visual disturbances

**LONG TERM EXPOSURE:** irritation

**INGESTION:**

**SHORT TERM EXPOSURE:** harmful or fatal if swallowed, nausea, vomiting, central nervous system effects, absorption will occur

**LONG TERM EXPOSURE:** central nervous system effects, kidney damage, liver damage, cancer

**CARCINOGEN STATUS:**

**OSHA:** Yes

**NTP:** Yes

**IARC:** Yes

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### 3. COMPOSITION, INFORMATION ON INGREDIENTS

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**COMPONENT:** ETHYLENE DICHLORIDE

**CAS NUMBER:** 107-06-2

**PERCENTAGE:** 98-100

**COMPONENT:** CHLOROFORM

**CAS NUMBER:** 67-66-3

**PERCENTAGE:** 0-0.2

**COMPONENT:** CIS-2-BUTENE

**CAS NUMBER:** 590-18-1

**PERCENTAGE:** 0-2

**COMPONENT:** ISOPROPYL CHLORIDE

**CAS NUMBER:** 75-29-6

**PERCENTAGE:** 0-1

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### 4. FIRST AID MEASURES

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**INHALATION:** If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic

External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY.

**SKIN CONTACT:** Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry, and shoes immediately. Wash contaminated areas with soap and water. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods. GET MEDICAL ATTENTION IMMEDIATELY.

**EYE CONTACT:** Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** Never give anything by mouth to an unconscious or convulsive person. If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep airway clear. Do not give fluids. GET MEDICAL ATTENTION IMMEDIATELY.

**NOTE TO PHYSICIAN:** This material is an aspiration hazard. Risk of aspiration must be weighed against possible toxicity of the material (see ingestion) when determining whether to induce emesis or to perform gastric lavage. This material sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material.

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## 5. FIRE FIGHTING MEASURES

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**FIRE AND EXPLOSION HAZARDS:** Moderate fire hazard. Vapor/air mixtures are explosive. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back.

**EXTINGUISHING MEDIA:** Use carbon dioxide, regular dry chemical, foam or water.

**FIRE FIGHTING:** Water may be ineffective as an extinguishing media. Wear NIOSH approved positive-pressure self-contained breathing apparatus. Eliminate all sources of ignition. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

**SENSITIVITY TO MECHANICAL IMPACT:** Not sensitive

**SENSITIVITY TO STATIC DISCHARGE:** Electrostatic charges may build up during handling. Grounding of equipment is recommended.

**FLASH POINT:** 55 F (13 C) (TCC)

**LOWER FLAMMABLE LIMIT:** 6.2%

**UPPER FLAMMABLE LIMIT:** 15.9%

**AUTOIGNITION:** 775 F (413 C)

### HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition products or combustion: oxides of carbon, chlorine, hydrogen chloride, phosgene

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## 6. ACCIDENTAL RELEASE MEASURES

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### OCCUPATIONAL RELEASE:

Evacuation of surrounding area may be necessary for large spills. Wear appropriate personal protective

equipment recommended in Section 8 of the MSDS. Remove sources of ignition. Stop leak if possible without personal risk. Shut off ventilation system if needed. Ventilate closed spaces before entering. Completely contain spilled material with dikes, sandbags, etc. Keep out of water supplies and sewers. Collect with appropriate absorbent and place into suitable container. Keep container tightly closed. Liquid material may be removed with a properly rated vacuum truck. Releases should be reported, if required, to appropriate agencies. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

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## 7. HANDLING AND STORAGE

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**STORAGE:** Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool, dry place. Store in a well-ventilated area. Do not enter confined spaces without following proper confined space entry procedures. Do not store in aluminum container or use aluminum fittings or transfer lines. Avoid heat, flames, sparks and other sources of ignition. Subject to storage regulations: U.S. OSHA 29 CFR 1910.106. Keep separated from incompatible substances (see Section 10 of the MSDS).

**HANDLING:** Do not taste or swallow. Keep away from heat, sparks and flame. Ground any equipment used in handling. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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### EXPOSURE LIMITS:

#### ETHYLENE DICHLORIDE:

#### ETHYLENE DICHLORIDE (1,2-DICHLOROETHANE):

50 ppm OSHA TWA

100 ppm OSHA ceiling

200 ppm OSHA peak (5 minutes in any 3 hours)

1 ppm (4 mg/m<sup>3</sup>) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

2 ppm (8 mg/m<sup>3</sup>) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)

10 ppm ACGIH TWA

#### CHLOROFORM:

50 ppm (240 mg/m<sup>3</sup>) OSHA ceiling

2 ppm (9.78 mg/m<sup>3</sup>) OSHA TWA (vacated by 58 FR 35338, June 30, 1993)

10 ppm ACGIH TWA

#### ISOPROPYL CHLORIDE:

#### 2-CHLOROPROPANE:

50 ppm AIHA WEEL recommended TWA

**VENTILATION:** Use explosion-proof equipment. Provide local exhaust ventilation where vapor may be generated. Ensure compliance with applicable exposure limits. Monitoring should be performed regularly to determine exposure limit level(s).

**EYE PROTECTION:** Wear safety glasses with side shields. Wear chemical safety goggles with a faceshield to protect against skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**CLOTHING:** Wear chemical resistant clothing to prevent skin contact. Contaminated clothing should be removed, then discarded or laundered.

**GLOVES:** Wear appropriate chemical resistant gloves. Gloves should be selected based on permeation test data.

**PROTECTIVE MATERIAL TYPES:** neoprene, polyvinyl alcohol (PVA), Viton(R)

**IMMEDIATELY DANGEROUS TO LIFE OR HEALTH:** 50 ppm

**RESPIRATOR:** A full facepiece air-purifying respirator may be used in concentrations up to the Immediately Dangerous to Life and Health (IDLH) Concentration. Supplied air should be used when the level is expected to be above the IDLH concentration, or when there is a potential for uncontrolled release. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**PHYSICAL STATE:** liquid

**APPEARANCE:** clear

**COLOR:** colorless

**ODOR:** mildly sweet odor

**MOLECULAR WEIGHT:** 98.96

**MOLECULAR FORMULA:** C<sub>2</sub>H<sub>4</sub>Cl<sub>2</sub>

**BOILING POINT:** 182.3 F (83.50 C)

**FREEZING POINT:** -31 F (-35 C)

**VAPOR PRESSURE:** 62.5 mmHg @ 20 C

**VAPOR DENSITY (air=1):** 3.42

**SPECIFIC GRAVITY (water=1):** 1.25

**WATER SOLUBILITY:** 0.84%

**PH:** Not applicable

**VOLATILITY:** 100%

**ODOR THRESHOLD:** 6-40 ppm (causes olfactory fatigue)

**EVAPORATION RATE:** 0.3 (ether=1)

**VOC:** 100%

**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Log Kow = 1.45-1.48

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## 10. STABILITY AND REACTIVITY

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**REACTIVITY:** Stable at normal temperatures and pressure.

**CONDITIONS TO AVOID:** Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Avoid contact with incompatible substances and conditions due to generation of phosgene and other toxic and irritating substances. Strong UV light such as welding arcs may generate phosgene. Solvent decomposition occurs when catalyzed by metal chlorides which can be produced by reaction of hydrochloric acid and metals.

**INCOMPATIBILITIES:** acids, amines, bases, alkali metals, such as aluminum, oxidizing materials, high

temperature sources, pure oxygen, strong UV light (welding arcs)

#### **HAZARDOUS DECOMPOSITION:**

Thermal decomposition products or combustion: oxides of carbon, chlorine, hydrogen chloride, phosgene

**POLYMERIZATION:** Will not polymerize.

## **11. TOXICOLOGICAL INFORMATION**

### **ETHYLENE DICHLORIDE FINISHED GRADE:**

#### **IRRITATION DATA:**

625 mg open skin-rabbit mild; 500 mg/24 hour(s) skin-rabbit mild; 63 mg eyes-rabbit severe; 500 mg/24 hour (s) eyes-rabbit mild

#### **TOXICITY DATA:**

670 mg/kg oral-rat LD50; 413 mg/kg oral-mouse LD50; 5700 mg/kg/7 hour(s) oral-dog LD50; 860 mg/kg oral-rabbit LD50; 2800 mg/kg skin-rabbit LD50; 1000 ppm/7 hour(s) inhalation-rat LC50; 300 ppm/7 hour(s) inhalation-monkey LC50

**CARCINOGEN STATUS:** NTP: Anticipated Human Carcinogen; IARC: Human Inadequate Evidence, Animal Sufficient Evidence, Group 2B

#### **LOCAL EFFECTS:**

Irritant: inhalation, skin, eye

#### **ACUTE TOXICITY LEVEL:**

Moderately Toxic: inhalation, ingestion

Slightly Toxic: dermal absorption

**TARGET ORGANS:** central nervous system, liver, kidneys

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** heart or cardiovascular disorders, heart problems, kidney disorders, liver disorders, respiratory disorders

**ADDITIONAL DATA:** Alcohol may enhance the toxic effects.

### **HEALTH EFFECTS:**

#### **INHALATION:**

#### **ACUTE EXPOSURE:**

**ETHYLENE DICHLORIDE:** May cause irritation of the mucous membranes of the upper respiratory tract, headache, nausea and vomiting. Central nervous system effects including lightheadedness, weakness, stupor, dysequilibrium, trembling, anxiety, drowsiness, delirium, hepatorenal failure, partial paralysis, collapse, and coma. Other symptoms may include cyanosis, fall of blood pressure, weak, rapid pulse, respiratory difficulties, pulmonary edema, bronchitis, subnormal temperature, and cardiac arrhythmias. Breathing excessively high concentrations may have a direct sensitizing effect on the heart which may lead to irregular heartbeats that may cause death.

#### **CHRONIC EXPOSURE:**

**ETHYLENE DICHLORIDE:** Chronic exposure to 10-37 ppm has caused nausea, vomiting, dizziness, and adverse nervous system and liver effects. Characteristic symptoms of acute exposure may develop from repeated exposures to 75-125 ppm. Repeated or prolonged exposure may also result in irritation of the mucous membranes, acute bronchial inflammation, loss of appetite, weight loss, anemia, constipation, insomnia, epigastric distress, liver and kidney damage. Neurologic effects including restlessness, irritability, nervousness, decreased muscle tone, difficulty walking, trembling hands, loss of reflexes, fatigue, and deafness may occur. Death may result from respiratory, circulatory, hepatic, or renal failure. The authors reported that they had exposed rats and mice 7 hr/day for 18 months to 250 to 150, 10, or 5 ppm and then kept them for their lifetime. No specific type of tumor was increased in mice or rats. Benign mammary tumors were increased in all exposed

groups of female rats, but these were ascribed to a general stress rather than a tumorigenic action.

#### **SKIN CONTACT:**

##### **ACUTE EXPOSURE:**

ETHYLENE DICHLORIDE: Direct contact with the liquid may cause irritation. Prolonged contact may result in severe irritation, moderate edema, and necrosis. Although absorbed across skin, material is not expected to produce toxicity. Skin absorption will occur.

##### **CHRONIC EXPOSURE:**

ETHYLENE DICHLORIDE: Repeated or prolonged contact with the liquid can produce a dry, scaly, fissured dermatitis due to the defatting action on the skin. Systemic effects, as in acute exposure, may ensue.

#### **EYE CONTACT:**

##### **ACUTE EXPOSURE:**

ETHYLENE DICHLORIDE: Exposure to high vapor concentrations or to the liquid may cause immediate discomfort, lacrimation, hyperemia of the conjunctiva, and corneal injury, which may return to normal within a day or two. If not removed, serious damage may result.

##### **CHRONIC EXPOSURE:**

ETHYLENE DICHLORIDE: Repeated or prolonged contact may cause conjunctivitis.

#### **INGESTION:**

##### **ACUTE EXPOSURE:**

ETHYLENE DICHLORIDE: Harmful or fatal if swallowed. Deaths may be delayed and severe ingestions may produce widespread organ damage. Ingestion may cause a burning sensation, nausea, vomiting, diarrhea, and intestinal cramps. This material is an aspiration hazard. Systemic toxicity, including central nervous system depression, hepatotoxicity, and nephrotoxicity, may occur as detailed in acute inhalation.

##### **CHRONIC EXPOSURE:**

ETHYLENE DICHLORIDE: May cause systemic effects as detailed in chronic inhalation. Rats receiving this material by gavage developed a significant increase in hemangiosarcomas of the circulatory system and tumors in the forestomach. Mice receiving this material by gavage developed lymphomas, lung tumors, hepatocellular carcinomas, and mammary and uterine adenocarcinomas. Shortcomings of this study included poor survival of treated animals, dosage adjustments during the course of the study, and questionable purity of the test material.

## **12. ECOLOGICAL INFORMATION**

#### **ECOTOXICITY DATA:**

**FISH TOXICITY:** 136 mg/L 96 hour(s) LC50 (Mortality) Fathead minnow; 430 mg/L 96 hour(s) LC50 (Mortality) Bluegill sunfish

**INVERTEBRATE TOXICITY:** 218 mg/L 48 hour(s) LC50 (Immobilization) Water flea (*Daphnia magna*); 113 mg/L 24 hour(s) EC50 Mysid Shrimp

**ALGAL TOXICITY:** >433 mg/L 96 hour(s) EC50 (Photosynthesis) Diatom (*Skeletonema costatum*); 189 mg/L 72 hour(s) EC50 Algae

**OTHER TOXICITY:** 2540 ug/L 9.5 hour(s) LC50 (Mortality) Salamander (*Ambystoma gracile*)

#### **FATE AND TRANSPORT:**



**BIODEGRADATION:** Various studies have shown that this material is not readily degradable when non-adapted, non-acclimated conditions were used. In contrast, some biodegradation occurred when adapted or induced microorganisms were used.

**PERSISTENCE:** **AIR:** In the atmosphere this material will degrade by reaction with hydroxyl radicals which are formed photochemically in the atmosphere with a half-life of 1-2 months. **SOIL:** This material evaporates fairly rapidly into the atmosphere because of its high vapor pressure. Little adsorption to soil is expected based upon an experimental Koc of 33 for silt loam. **WATER:** Primary loss will be by evaporation into the atmosphere. The aquatic half-life ranges from hours to a few days depending on wind and mixing conditions. Chemical and biological degradation is expected to be very slow. Adsorption to sediment is not expected. This material is not expected to bioconcentrate in fish due to its low octanol/water partition coefficient (Log Kow=1.48).

**BIOCONCENTRATION:** This material is not expected to bioconcentrate in organisms or to accumulate in soils.

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### 13. DISPOSAL CONSIDERATIONS

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Reuse or reprocess if possible. Keep out of water supplies and sewers. Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. U077. Based on chemical composition, may be subject to disposal regulations: D019. D022. D032. D034. D039. D040. D043.

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### 14. TRANSPORT INFORMATION

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**U.S. DOT 49 CFR 172.101:**

**PROPER SHIPPING NAME:** Ethylene dichloride

**ID NUMBER:** UN1184

**HAZARD CLASS OR DIVISION:** 3

**PACKING GROUP:** II

**LABELING REQUIREMENTS:** 3; 6.1

**ADDITIONAL SHIPPING DESCRIPTION:** Transport by vessel domestic requires flashpoint on shipping papers.

**DOT HAZARDOUS SUBSTANCE(S):**

Ethylene dichloride 100 lb(s) (45.4 kg(s))

Chloroform 10 lb(s) (4.54 kg(s))

Vinyl chloride 1 lb(s) (0.454 kg(s))

Ethylene oxide 10 lb(s) (4.54 kg(s))

**CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**

**SHIPPING NAME:** Ethylene dichloride

**UN NUMBER:** UN1184

**CLASS:** 3; 6.1

**PACKING GROUP/RISK GROUP:** II

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### 15. REGULATORY INFORMATION

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**U.S. REGULATIONS:**



**CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):****Ethylene dichloride (1,2-Dichloroethane):** 100 LBS RQ**1,1,2-Trichloroethane:** 100 LBS RQ**VINYLDINE CHLORIDE:** 100 LBS RQ**Benzene:** 10 LBS RQ**PENTACHLOROETHANE:** 10 LBS RQ**SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):** Not regulated.**SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):**

ACUTE: Yes

CHRONIC: Yes

FIRE: Yes

REACTIVE: No

SUDDEN RELEASE: No

**SARA TITLE III SECTION 313 (40 CFR 372.65):****Ethylene dichloride (1,2-Dichloroethane)****Benzene**

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372. Refer to Section 3.

**OSHA PROCESS SAFETY (29CFR1910.119):** Not regulated.**STATE REGULATIONS:****California Proposition 65:**

Known to the state of California to cause the following:

**Ethylene dichloride (1,2-Dichloroethane)**

Cancer (Oct 01, 1987)

**1,1,2-Trichloroethane**

Cancer (Oct 01, 1990)

**Benzene**

Cancer (Feb 27, 1987)

Developmental toxicity (Dec 26, 1997)

Male reproductive toxicity (Dec 26, 1997)

This product may contain contaminants known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act.

**NEW JERSEY WORKER AND COMMUNITY RIGHT TO KNOW:****REPORTING REQUIREMENT:**

ETHYLENE DICHLORIDE 107-06-2 98-100%

**RIGHT TO KNOW HAZARDOUS SUBSTANCE LIST:**

ETHYLENE DICHLORIDE 107-06-2 98-100%

1,1,2-TRICHLOROETHANE 79-00-5 0-2 ppm

VINYLDENE CHLORIDE 75-35-4 0-100 ppm

BENZENE 71-43-2 0-4000 ppm

PENTACHLOROETHANE 76-01-7 0-75 ppm

ISOPROPYL CHLORIDE 75-29-6 0-1%

**SPECIAL HEALTH HAZARD SUBSTANCE LIST:**

ETHYLENE DICHLORIDE 107-06-2 98-100%  
1,1,2-TRICHLOROETHANE 79-00-5 0-2 ppm  
VINYLIDENE CHLORIDE 75-35-4 0-100 ppm  
BENZENE 71-43-2 0-4000 ppm

**PENNSYLVANIA RIGHT TO KNOW:  
REPORTING REQUIREMENT:**

ETHYLENE DICHLORIDE 107-06-2 98-100%

**HAZARDOUS SUBSTANCE LIST:**

ETHYLENE DICHLORIDE 107-06-2 98-100%  
CIS-2-BUTENE 590-18-1 0-2%  
ISOPROPYL CHLORIDE 75-29-6 0-1%

**ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST:**

ETHYLENE DICHLORIDE 107-06-2 98-100%

**SPECIAL HAZARDOUS SUBSTANCE LIST:**

ETHYLENE DICHLORIDE 107-06-2 98-100%  
BENZENE 71-43-2 0-4000 ppm

**CANADIAN REGULATIONS:**

**CONTROLLED PRODUCTS REGULATIONS (CPR):** This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHMIS CLASSIFICATION:** B2, D1A, D2A, D2B.

**NATIONAL INVENTORY STATUS:**

**U.S. INVENTORY (TSCA):** All the components of this substance are listed on or are exempt from the inventory. Subject to a TSCA Section (4) Enforceable Consent Agreement. OxyChem and others are to report as required under Section 12(b). (ETHYLENE DICHLORIDE 107-06-2) (1,1,2-TRICHLOROETHANE 79-00-5)

**TSCA 12(b) EXPORT NOTIFICATION:**

**1,2-ETHYLENE DICHLORIDE**

**CAS NUMBER:** 107-06-2

SECTION 4

**1,1,2-TRICHLOROETHANE**

**CAS NUMBER:** 79-00-5

SECTION 4

**1-CHLORO-2-BROMOETHANE**

**CAS NUMBER:** 107-04-0

SECTION 5

**VINYLIDENE CHLORIDE**

**CAS NUMBER:** 75-35-4

SECTION 4

**ETHANE, PENTACHLORO**

**CAS NUMBER:** 76-01-7

**SECTION 5**

**CANADA INVENTORY (DSL/NDL):** All components of this product are listed on the DSL.

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**16. OTHER INFORMATION**

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**MSDS SUMMARY OF CHANGES**

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