

SAFETY DATA SHEET

SAMPLE FOR LABORATORY USE ONLY

PLANT INTERMEDIATE

M45684 - ANSI - EN



EDC HI-BOILS

SDS No.: M45684
Rev. Num. 02

SDS Revision Date: 16-May-2016

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Oxy Vinyls, LP 5005 LBJ Freeway Suite 500, LB30 Dallas, Texas 75244-6123
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Synonyms:	Catoxid feedstock, Crude EDC (ethylene dichloride)
Product Use:	Process cleaner

SECTION 2. HAZARDS IDENTIFICATION

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OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: Black
Physical State: Liquid
Odor: Sweet, Pungent

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. TOXIC IF INHALED. MAY BE ABSORBED THROUGH THE SKIN. CAUSES SERIOUS EYE DAMAGE. CAUSES SKIN IRRITATION. MAY PRODUCE SYMPTOMS OF CENTRAL NERVOUS SYSTEM DEPRESSION INCLUDING HEADACHE, DIZZINESS, NAUSEA, LOSS OF BALANCE AND DROWSINESS. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. MAY CAUSE CANCER. CAUSES DAMAGE TO CENTRAL NERVOUS SYSTEM (CNS), LIVER, KIDNEY, AND ADRENAL GLAND. CAUSES DAMAGE LIVER, KIDNEY, NERVOUS SYSTEM, RESPIRATORY SYSTEM, AND GASTROINTESTINAL SYSTEM THROUGH PROLONGED OR REPEATED EXPOSURE.

PHYSICAL HAZARDS: HIGHLY FLAMMABLE LIQUID AND VAPOR.

AQUATIC TOXICITY: HARMFUL TO AQUATIC LIFE.

ECOLOGICAL HAZARDS: WARNING: Contains Carbon tetrachloride, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks and flame. Avoid exposure to strong UV light - can cause generation of phosgene. Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Use only with adequate ventilation.

GHS CLASSIFICATION:

GHS: PHYSICAL HAZARDS:	Flammable Liquid - Cat. 2 Highly Flammable
GHS: CONTACT HAZARD - SKIN:	Category 1 - Causes severe skin burns and eye damage
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage
GHS: ACUTE TOXICITY - INHALATION:	Category 3 - Toxic if inhaled
GHS: ACUTE TOXICITY - ORAL:	Category 3 - Toxic if swallowed
GHS: ASPIRATION HAZARD:	Category 1 - May be fatal if swallowed and enters airways

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GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 1 - Causes damage to central nervous system (CNS), liver, kidney Category 1 - Causes damage to: Respiratory System Category 3 - May cause drowsiness or dizziness
GHS: TARGET ORGAN TOXICITY (REPEATED EXPOSURE):	Category 1 - Causes damage to liver, kidney, nervous system, respiratory system, and gastrointestinal system through prolonged or repeated exposure Category 2 - May cause damage to kidneys through prolonged or repeated exposure
GHS: CARCINOGENICITY:	Category 1 - May cause cancer
GHS: REPRODUCTION TOXIN:	Category 1 - May damage fertility or the unborn child
GHS: HAZARDOUS TO AQUATIC ENVIRONMENT - ACUTE HAZARD:	Category 3 - Harmful to aquatic life
GHS: HAZARDOUS TO THE OZONE LAYER:	Category 1 - Harms the public health and the environment by destroying ozone in the upper atmosphere

GHS SYMBOL: Flame, Skull and Crossbones, Corrosive, Exclamation mark, Health hazards**GHS SIGNAL WORD:** **DANGER****GHS HAZARD STATEMENTS:****GHS - Physical Hazard Statement(s)**

- Highly flammable liquid and vapor

GHS - Health Hazard Statement(s)

- Toxic if swallowed
- Toxic if inhaled
- Causes skin irritation
- Causes serious eye damage
- May cause cancer
- May damage fertility or the unborn child
- Causes damage to Central Nervous System (CNS), liver, kidney, and respiratory system
- May cause drowsiness or dizziness
- Causes damage to liver, kidney, nervous system, respiratory system, and gastrointestinal system through prolonged or repeated exposure
- May be fatal if swallowed and enters airways
- May cause damage to kidneys through prolonged or repeated exposure

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GHS - Environmental Hazard Statement(s)

- Harmful to aquatic life
- Harms public health and the environment by destroying ozone in the upper atmosphere

GHS - Precautionary Statement(s) - Prevention

- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/ bond container and receiving equipment
- Use explosion-proof equipment (electrical equipment, ventilating equipment, lighting equipment, etc.)
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash skin and contaminated clothing thoroughly after handling
- Do not eat, drink or smoke when using this product
- Avoid breathing mist, vapors, or spray
- Use only outdoors or in a well-ventilated area
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use respiratory protection as required
- Avoid release to the environment

GHS - Precautionary Statement(s) - Response

- In case of fire: use dry chemical, foam, or carbon dioxide (CO₂) to extinguish
- IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower
- IF ON SKIN: Wash with plenty of soap and water
- If skin irritation occurs: Get medical advice/attention
- Take off immediately all contaminated clothing and wash it before reuse
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician
- Specific treatment is urgent (see Section 4 of SDS or first aid information on this label)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF INHALED: Remove person to fresh air and keep comfortable for breathing

GHS - Precautionary Statement(s) - Storage

- Store in a well-ventilated place
- Keep cool
- Keep container tightly closed
- Store in a secure manner

GHS - Precautionary Statement(s) - Disposal

- Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Synonyms: Catoxid feedstock, Crude EDC (ethylene dichloride)

SECTION 4. FIRST AID MEASURES

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 and/or 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.

Most Important Symptoms/Effects (Acute and Delayed):

Acute Symptoms/Effects: Listed below.

Interaction with Other Chemicals Which Enhance Toxicity: Alcohol may enhance toxic effects.

Notes to Physician: This material is an aspiration hazard. Risk of aspiration must be weighed against possible toxicity of the material 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.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: Severe fire hazard. Vapor/air mixtures are explosive. The vapor is heavier than air. Vapors or gases may ignite at distant sources and flash back.

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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 operated in pressure demand mode. 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.

Component	Immediately Dangerous to Life/ Health (IDLH)
Ethylene Dichloride 107-06-2	50 ppm IDLH
1,1,2-Trichloroethane 79-00-5	100 ppm IDLH
Tetrachloroethylene [Perc] 127-18-4	150 ppm IDLH
Chloroform 67-66-3	500 ppm IDLH
1,1,2,2-Tetrachloroethane 79-34-5	100 ppm IDLH
Hexachloroethane 67-72-1	300 ppm IDLH
1,1-Dichloroethane 75-34-3	3000 ppm IDLH
Chlorobenzene 108-90-7	1000 ppm IDLH
Carbon Tetrachloride 56-23-5	200 ppm IDLH
Trichloroethylene 79-01-6	1000 ppm IDLH

Hazardous Combustion Products: Oxides of carbon, Chlorine, Hydrogen chloride, Phosgene**Sensitivity to Mechanical Impact:** Not sensitive.

Sensitivity to Static Discharge: Electrostatic charges may build up during handling and may form ignitable vapor-air mixtures in storage containers. Ground equipment in accordance with industry standards and best practices such as NFPA 77 [Recommended Practices on Static Electricity (2007)] and American Petroleum Institute (API) RP Recommended Practice 2003 [Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents (2008)].

Flash point: <100 F (<38 C)**GHS: PHYSICAL HAZARDS:**

- Flammable Liquid - Cat. 2 Highly Flammable

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Occupational Release: Remove sources of ignition. Ventilate closed spaces before entering. Vapors or gases may ignite at distant ignition sources and flash back. Stop leak if possible without personal risk. Reduce vapors with water spray. Collect with appropriate absorbent and place into suitable container. Keep container tightly closed. Liquid material may be removed with a properly rated vacuum truck. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid breathing vapor or mist. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and flame. Ground any equipment used in handling. Use non-sparking tools and equipment. All energized electrical equipment must be designed in accordance with the electrical classification of the area.

Safe Storage Conditions:

Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool, dry area. Store in a well-ventilated area. Do not enter confined spaces unless adequately ventilated. Do not store in aluminum container or use aluminum fittings or transfer lines. Avoid heat, flames, sparks and other sources of ignition. May be subject to storage regulations: U.S. OSHA 29 CFR 1910.106. Keep separated from incompatible substances (see Section 10 of SDS).

Incompatibilities/ Materials to Avoid:

acids, bases, metals, Alkali metals, oxidizing agents, High temperature sources, Pure oxygen, Strong UV light (welding arcs)

GHS: PHYSICAL HAZARDS:

- Flammable Liquid - Cat. 2 Highly Flammable

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

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- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Ethylene Dichloride 107-06-2 (5 - 60)	1 ppm	2 ppm	-----
1,1,2-Trichloroethane 79-00-5 (15 - 50)	10 ppm		-----
Tetrachloroethylene [Perc] 127-18-4 (0 - 15)	25 ppm	100 ppm	200 ppm
Chloroform 67-66-3 (0 - 10)	2 ppm		50 ppm
1,1,2,2-Tetrachloroethane 79-34-5 (0 - 8)	1 ppm		-----
Hexachloroethane 67-72-1 (0 - 5)	1 ppm		-----
1,1-Dichloroethane 75-34-3 (0 - 2)	100 ppm		-----
Chlorobenzene 108-90-7 (0 - 2)	10 ppm		-----
Carbon Tetrachloride 56-23-5 (0 - 2)	2 ppm	10 ppm	25 ppm
Trichloroethylene 79-01-6 (0 - 1)	10 ppm	25 ppm	-----
Hexachlorobenzene 118-74-1 (0 - 1)	0.17 ppb		-----

ENGINEERING CONTROLS: Use explosion proof equipment and lighting in classified/controlled areas. Provide local exhaust ventilation where vapor or mist may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear safety glasses with side-shields.

Skin and Body Protection: Wear appropriate chemical resistant clothing.

Protective Material Types:

Neoprene, Polyvinyl alcohol (PVA), Viton®

Respiratory Protection: A NIOSH approved respirator with organic vapor cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

Component	Immediately Dangerous to Life/ Health (IDLH)
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Ethylene Dichloride 107-06-2	50 ppm IDLH
1,1,2-Trichloroethane 79-00-5	100 ppm IDLH
Tetrachloroethylene [Perc] 127-18-4	150 ppm IDLH
Chloroform 67-66-3	500 ppm IDLH
1,1,2,2-Tetrachloroethane 79-34-5	100 ppm IDLH
Hexachloroethane 67-72-1	300 ppm IDLH
1,1-Dichloroethane 75-34-3	3000 ppm IDLH
Chlorobenzene 108-90-7	1000 ppm IDLH
Carbon Tetrachloride 56-23-5	200 ppm IDLH
Trichloroethylene 79-01-6	1000 ppm IDLH

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Black
Odor: Sweet, Pungent
Boiling Point/Range: 200-300 F (93.3-149 C)
Vapor Pressure: 1.95 atm @ 37.8 C
Vapor Density (air=1): >1
Relative Density/Specific Gravity (water=1): 1.27 - 1.37
Density: 1.27 - 1.37 g/cc
Water Solubility: Slightly soluble
Flash point: <100 F (<38 C)

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and pressures.

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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/ Materials to Avoid: acids. bases. metals. Alkali metals. oxidizing agents. High temperature sources. Pure oxygen. Strong UV light (welding arcs).

Hazardous Decomposition Products: oxides of carbon, Chlorine, hydrogen chloride, phosgene

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION**TOXICITY DATA:****PRODUCT TOXICITY DATA:** EDC HI-BOILS**COMPONENT TOXICITY DATA:**

Note: The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Ethylene Dichloride 107-06-2	680 mg/kg (Rat) 1120 mg/kg (Rat)	4890 mg/kg (Rabbit)	4 mg/L (6 hr-Rat)
1,1,2-Trichloroethane 79-00-5	836 mg/kg (Rat)	5371 mg/kg (Rabbit)	2.78 mg/L (8 hr-Rat)
Tetrachloroethylene [Perc] 127-18-4	2629 mg/kg (Rat)	2800 mg/kg (Mouse)	27.8 mg/L (4 hr-Rat)
Ethane, 1-bromo-2-chloro- 107-04-0	64 mg/kg (Rat)	-----	-----
2-Butene, 1,3-dichloro- 926-57-8	300 mg/kg (Rat)	-----	546 ppm (4 hr-Rat)
Chloroform 67-66-3	-----	20 g/kg (Rabbit)	47702 mg/m ³ (4 hr-Rat)
Pentachloroethane 76-01-7	920 mg/kg (Rat)	-----	4238 ppm (2 hr-Rat)
1,1,2,2-Tetrachloroethane 79-34-5	200 mg/kg (Rat) 200 µL/kg (Rat)	3990 mg/kg (Rabbit)	8.6 mg/L (4 hr-Rat)
Hexachloroethane 67-72-1	4460 mg/kg (Rat)	32000 mg/kg (Rabbit)	-----
Propane, 1,3-dichloro- 142-28-9	1250 mg/kg (Rat)	-----	-----

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1,1-Dichloroethane 75-34-3	14.1 g/kg (Rat) 1120 mg/kg (Rat)	-----	13000 ppm (4 hr-Rat)
Chlorobenzene 108-90-7	2914 mg/kg (Rat)	-----	-----
Carbon Tetrachloride 56-23-5	2350 mg/kg (Rat)	5070 mg/kg (Rat)	8000 ppm (4 hr-Rat)
Trichloroethylene 79-01-6	-----	29000 mg/kg (Rabbit)	26 mg/L (4 hr-Rat)
Hexachlorobenzene 118-74-1	3500 mg/kg (Rat)	-----	-----

POTENTIAL HEALTH EFFECTS:

Eye contact: Causes serious eye damage.

Skin contact: Causes skin burns. May be absorbed through the skin.

Inhalation: May cause respiratory tract irritation. May cause drowsiness or dizziness. Causes damage to the liver, kidneys, respiratory system, and nervous system.

Ingestion: This material is an aspiration hazard. It may be fatal if it is swallowed and enters the airways.

Chronic Effects: Causes damage to the liver, kidneys, respiratory system, and nervous system through prolonged or repeated exposure. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause cancer based on animal data.

SIGNS AND SYMPTOMS OF EXPOSURE:

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CHRONIC TOXICITY:

ETHYLENE DICHLORIDE. Rats and mice exposed to ethylene dichloride via inhalation did not show increased development of tumors. Benign mammary tumors were increased in the female animals, but these were ascribed to a general stress rather than a tumorigenic action. Rats receiving this material by gavage developed a significant increase in hemangiosarcomas of the circulatory system and tumors in the forestomach. Mice receiving the material by gavage developed lymphomas, lung tumors, hepatocellular carcinomas, and mammary and uterine adenocarcinomas. CARBON TETRACHLORIDE. Limited data suggest there is a low potential for developmental toxicity in animals. Reproductive effects have been reported in animals. This material has been reported to prolong the estrus cycle, to cause testicular atrophy and to decrease sperm counts in rats. Ovary changes were observed in female mice that were exposed for 2 years. Absolute and relative testicular weights were elevated in male mice. Administration during gestation produced marked maternal toxicity and total resorption of fetuses in some animals, but no teratogenicity or other adverse effects on survivors. HEXACHLOROBENZENE: Hexachlorobenzene produces adverse pregnancy outcome in rodents at maternally toxic doses. The most important effect may be an increase in perinatal mortality associated with lactational exposure. Hexachlorobenzene crosses the placenta. Illness in human infants attributed to lactational exposure to hexachlorobenzene has also been described.

Interaction with Other Chemicals Which Enhance Toxicity: Alcohol may enhance toxic effects.

GHS HEALTH HAZARDS:

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

Skin Absorbent / Dermal Route? Yes.

GHS: CARCINOGENICITY:

Category 1 - May cause cancer.

Component	NTP:	IARC (GROUP 1):	IARC (GROUP 2):	OSHA:
Ethylene Dichloride	Not listed	Not listed	Group 2	Listed
Tetrachloroethylene [Perc]	Not listed	Not listed	Group 2	Listed
Chloroform	Not listed	Not listed	Group 2	Listed
1,1,2,2-Tetrachloroethane	Not listed	Not listed	Group 2	Listed
Hexachloroethane	Not listed	Not listed	Group 2	Listed
Carbon Tetrachloride	Not listed	Not listed	Group 2	Listed
Trichloroethylene	Not listed	Group 1	Not listed	Listed
Hexachlorobenzene	Not listed	Not listed	Group 2	Listed

MUTAGENIC DATA:

One or more components in this material have tested positive in mutagenicity studies.

SECTION 12. ECOLOGICAL INFORMATION**ECOTOXICITY DATA:**

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Aquatic Toxicity:

This material is toxic to fish and aquatic organisms

FATE AND TRANSPORT:

BIODEGRADATION: This material is believed to be subject to biodegradation.

PERSISTENCE: This material has not been tested, but based on the components it is believed not to persist in the environment.

BIOCONCENTRATION: This material has not been tested, but based on the components it is believed not to bioconcentrate.

ADDITIONAL ECOLOGICAL INFORMATION: This material has not been tested, but based on the components it is believed to be moderately toxic to aquatic organisms, while exhibiting slight toxicity to terrestrial organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:

Reuse or reprocess, if possible. Dispose in accordance with all applicable regulations. May be subject to disposal regulations: U.S. EPA 40 CFR 261. Hazardous Waste Number(s): D001, D019, D021, D022, D028, D032, D034, D039, D040.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN1992

PROPER SHIPPING NAME: Flammable liquids, toxic, n.o.s. (ETHYLENE DICHLORIDE, CHLOROFORM)

HAZARD CLASS/ DIVISION: 3

PACKING GROUP: II

LABELING REQUIREMENTS: 3, 6.1

MARINE POLLUTANT: Tetrachloroethylene pentachloroethane Carbon tetrachloride

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RQ (lbs):

RQ 100 lbs. (Ethylene Dichloride)
 RQ 100 Lbs. (1,1,2-Trichloroethane)
 RQ 100 lbs (Tetrachloroethylene)
 RQ 10 Lbs. (Chloroform)
 RQ 100 Lbs. (1,1,2,2-Tetrachloroethane)
 RQ 10 Lbs. (Pentachloroethane)
 RQ 100 Lbs. (Hexachloroethane)
 RQ 10 Lbs. (Carbon tetrachloride)
 RQ 1,000 Lbs. (1,1-Dichloroethane)
 RQ 100 Lbs. (Trichloroethylene)
 RQ 10 Lbs. (Hexachlorobenzene)
 RQ 1,000 Lbs. (1,3-Dichloropropane)
 RQ 100 Lbs. (Chlorobenzene)

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**Status:** This material will not be shipped in Canada.**LABELING REQUIREMENTS:** 3, 6.1**SECTION 15. REGULATORY INFORMATION****U.S. REGULATIONS****OSHA REGULATORY STATUS:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Component	CERCLA Reportable Quantities:
Ethylene Dichloride	1 lb (final RQ) 100 lb (final RQ)
1,1,2-Trichloroethane	1 lb (final RQ) 100 lb (final RQ)
Tetrachloroethylene [Perc]	100 lb (final RQ)
Chloroform	10 lb (final RQ)
Pentachloroethane	1 lb (final RQ) 10 lb (final RQ)
1,1,2,2-Tetrachloroethane	1 lb (final RQ) 100 lb (final RQ)
Hexachloroethane	1 lb (final RQ) 100 lb (final RQ)

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Propane, 1,3-dichloro-	1000 lb (final RQ)
1,1-Dichloroethane	1 lb (final RQ) 1000 lb (final RQ)
Chlorobenzene	1 lb (final RQ) 100 lb (final RQ)
Carbon Tetrachloride	10 lb (final RQ)
Trichloroethylene	1 lb (final RQ) 100 lb (final RQ)
Hexachlorobenzene	1 lb (final RQ) 10 lb (final RQ)

SARA EHS Chemical (40 CFR 355.30)

If a release is reportable under EPCRA, notify the state emergency response commission and local emergency planning committee. If the TPQ is met, facilities are subject to reporting requirements under EPCRA Sections 311 and 312.

Component	EPCRA RQs	Section 302 Threshold Planning Quantity (TPQs)
Chloroform	10 lb (EPCRA RQ)	10000 lb TPQ

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Fire Hazard, Acute Health Hazard, Chronic Health Hazard, Extremely Hazardous

EPCRA SECTION 313 (40 CFR 372.65):

The following chemicals are listed in 40 CFR 372.65 and may be subject to Community Right-to Know Reporting requirements

Component	Status:
Ethylene Dichloride	0.1 %
1,1,2-Trichloroethane	1.0 %
Tetrachloroethylene [Perc]	Listed - 0.1 %
Chloroform	Listed
Pentachloroethane	1.0 %
1,1,2,2-Tetrachloroethane	1.0 %
Hexachloroethane	0.1 %
1,1-Dichloroethane	1.0 %
Chlorobenzene	1.0 %
Carbon Tetrachloride	0.1 %
Trichloroethylene	0.1 %
Hexachlorobenzene	0.1 %

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

The PSM standard may apply to processes which involve a flammable liquid or gas in a quantity of 10,000 pounds (4535.9 kg) or more.

NATIONAL INVENTORY STATUS

EDC HI-BOILS**SAMPLE FOR LABORATORY USE ONLY
PLANT INTERMEDIATE**

SDS No.: M45684

Supersedes Date: 2009-07-October

SDS Revision Date: 16-May-2016

Rev. Num.02

Component	<u>U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA):</u>
Ethylene Dichloride 107-06-2	Listed
1,1,2-Trichloroethane 79-00-5	Listed
Tetrachloroethylene [Perc] 127-18-4	Listed
Ethane, 1-bromo-2-chloro- 107-04-0	Listed
2-Butene, 1,3-dichloro- 926-57-8	Listed
Chloroform 67-66-3	Listed
Pentachloroethane 76-01-7	Listed
1,1,2,2-Tetrachloroethane 79-34-5	Listed
Hexachloroethane 67-72-1	Listed
Butane, 1,4-dichloro- 110-56-5	Listed
Propane, 1,3-dichloro- 142-28-9	Listed
1,1-Dichloroethane 75-34-3	Listed
Chlorobenzene 108-90-7	Listed
Carbon Tetrachloride 56-23-5	Listed
Trichloroethylene 79-01-6	Listed
Hexachlorobenzene 118-74-1	Listed

TSCA 12(b): This product is subject to export notification.**Canadian Chemical Inventory:** This material will not be sold in Canada.**STATE REGULATIONS****CANADIAN REGULATIONS**

- This material is a plant intermediate stream
- This material will not be sold in Canada

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Component	Canadian Chemical Inventory:	NDSL:	WHMIS Hazard Class:	WHMIS - Classifications of Substances:
Ethylene Dichloride			Listed at 1	B2,D1A,D2A
1,1,2-Trichloroethane			Listed at 1	D1A,D2B
Tetrachloroethylene [Perc]			Listed at 1	D1B,D2A,D2B
2-Butene, 1,3-dichloro-		Present	Listed at 1	
Chloroform			Listed at 0.1	D1B,D2A,D2B
Pentachloroethane			Listed at 1	
1,1,2,2-Tetrachloroethane			Listed at 1	D1A,D2A
Hexachloroethane			Listed at 1	
Butane, 1,4-dichloro-		Present		
Propane, 1,3-dichloro-		Present		B2,D2B
1,1-Dichloroethane		Present	Listed at 1	B2
Chlorobenzene			Listed at 1	B2,D1B,D2B
Carbon Tetrachloride			Listed at 0.1	D1A,D2A,D2B
Trichloroethylene			Listed at 1	D1B,D2A,D2B
Hexachlorobenzene			Listed at 1	

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Health Risk Management

Rev. Date: 16-May-2016

Reason for Revision:

- Added GHS Information: SEE SECTION 2
- HMIS and/or NFPA Rating has changed: SEE SECTION 16

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

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End of Safety Data Sheet