

SAFETY DATA SHEET

M47046 - ANSI - EN



1,1,2,3 - TETRACHLOROPROPENE - TECP (4CPe)

SDS No.: M47046

SDS Revision Date: 29-Nov-2017

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
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
Product Identifier:	1,1,2,3 - TETRACHLOROPROPENE - TECP (4CPe)
Synonyms:	HCC-1230xa; 4CPe; 1123-tetCPe
Product Use:	Chemical Intermediate
Uses Advised Against:	None identified
Chemical Family:	Chlorinated Hydrocarbon

SECTION 2. HAZARDS IDENTIFICATION

1,1,2,3 - TETRACHLOROPROPENE - TECP (4CPe)

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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: Colorless
Physical State: Liquid
Appearance: Clear liquid
Odor: Strong, Characteristic Odor

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: HARMFUL IF SWALLOWED. HARMFUL IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. CAUSES SERIOUS EYE DAMAGE. MAY CAUSE AN ALLERGIC SKIN REACTION. SUSPECTED OF CAUSING GENETIC DEFECTS. SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

AQUATIC TOXICITY: Very toxic to aquatic organisms. Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye, and face protection. Do not breathe mist, vapors, or spray. Wash skin and contaminated clothing thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Use personal protective equipment as required. Avoid release to the environment.

HAZARD CLASSIFICATION:

GHS: CONTACT HAZARD - SKIN:	Category 1 - Causes severe skin burns and eye damage
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage
GHS: SENSITIZATION HAZARD:	Skin Sensitizer Category 1 - May cause an allergic skin reaction
GHS: ACUTE TOXICITY - DERMAL:	Category 4 - Harmful in contact with skin
GHS: ACUTE TOXICITY - ORAL:	Category 4 - Harmful if swallowed
GHS: GERM CELL MUTAGENICITY:	Category 2 - Suspected of causing genetic defects
GHS: REPRODUCTION TOXIN:	Category 2 - Suspected of damaging fertility or the unborn child
HAZARDOUS TO AQUATIC ENVIRONMENT - ACUTE HAZARD:	Category 1 - Very toxic to aquatic life
HAZARDOUS TO AQUATIC ENVIRONMENT - CHRONIC HAZARD:	Category 1 - Very toxic to aquatic life with long lasting effects

UNKNOWN ACUTE TOXICITY: Not applicable. 100% of this product consists of ingredient(s) of known acute toxicity.

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GHS SYMBOL: Corrosive, Health hazards, Exclamation mark, Environmental hazard



GHS SIGNAL WORD: DANGER

GHS HAZARD STATEMENTS:

GHS - Physical Hazard Statement(s)

- Not classified according to GHS criteria

GHS - Health Hazard Statement(s)

- Harmful if swallowed
- Harmful in contact with skin
- Causes severe skin burns and eye damage
- Causes serious eye damage
- May cause an allergic skin reaction
- Suspected of causing genetic defects
- Suspected of damaging fertility or the unborn child

GHS - Environmental Hazard Statement(s)

- Very toxic to aquatic life with long lasting effects

GHS - Precautionary Statement(s) - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Do not breathe mist, vapors, or spray
- Wash skin and contaminated clothing thoroughly after handling
- Do not eat, drink or smoke when using this product
- Contaminated work clothing must not be allowed out of the workplace
- Wear eye protection, face protection, protective gloves, protective clothing
- Use personal protective equipment as required
- Avoid release to the environment

GHS - Precautionary Statement(s) - Response

- IF SWALLOWED: Call a POISON CENTER OR LICENSED HEALTH CARE PROVIDER if you feel unwell
- Rinse mouth if ingested
- IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
- IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with soap and water.
- IF ON SKIN: Wash with plenty of soap and water
- Wash contaminated clothing before reuse
- IF EXPOSED (skin): Immediately call a POISON CENTER OR LICENSED HEALTH CARE PROVIDER
- Take off contaminated clothing and wash it before reuse
- If skin irritation or rash occurs: Get medical advice/attention

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- Specific treatment for skin contact (see First Aid information in Section 4 of the SDS)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF EXPOSED (eyes): Immediately call a POISON CENTER OR LICENSED HEALTH CARE PROVIDER
- IF exposed or concerned: Get medical advice/attention
- Collect spillage. Hazardous to the aquatic environment

GHS - Precautionary Statement(s) - Storage

- 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

Health Hazards Not Otherwise Classified

- MAY BE HARMFUL IF ABSORBED THROUGH SKIN

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym(s) for Product: HCC-1230xa, 4CPe, 1123-tetCPe

Component	Percent [%]	CAS Number
1,1,2,3 - Tetrachloropropene	98-100	10436-39-2

SECTION 4. FIRST AID MEASURES

INHALATION: IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing. There is no specific antidote, treat symptomatically.

SKIN CONTACT: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Discard contaminated leather goods. If skin irritation or rash occurs, get medical advice/attention. Specific Treatment for skin sensitization: Follow clinical protocols for allergic dermatitis.

EYE CONTACT: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most Important Symptoms/Effects (Acute and Delayed):**Acute Symptoms/Effects:**

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Inhalation (Breathing): It may cause irritation of the upper and lower airways, coughing, difficulty breathing (dyspnea), pulmonary edema. It may cause central nervous system depression (narcotic effects), which can result in drowsiness, dizziness, incoordination (disequilibrium, ataxia), headache, slurred speech, a variety of other symptoms.

Skin: When this material contacts skin it may cause redness, irritation, itching, burning sensation, rash, hives (acute or delayed contact urticaria), and/or allergic contact dermatitis. This chemical may be significantly absorbed through the skin, causing results similar to ingestion exposures.

Eye: Eye Irritation: Exposure to eyes may cause irritation, pain, tearing, redness, swelling, and possible corneal damage. May cause conjunctival redness and edema, and lid redness and edema. Edema may lead to blurred vision. Effects may be more serious with repeated or prolonged contact.

Ingestion (Swallowing): Ingestion is not a likely route of exposure. Exposure by ingestion may cause irritation, nausea, and vomiting. If ingestion occurs, effects may be similar to inhalation.

Delayed Symptoms/Effects:

- This material is considered to be a skin sensitizer; after initial skin contact, it may induce an allergic response following additional skin exposures
- Suspected mutagen
- Suspected of damaging fertility or the unborn child
- Prolonged and repeated contact may cause eye damage and blindness, and may cause liver damage

Interaction with Other Chemicals Which Enhance Toxicity: Combining with other solvents such as alcohol, volatile hydrocarbons, and halogenated hydrocarbons may be additive for central nervous depression effects.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin; and respiratory conditions including asthma and other breathing disorders. Any condition that can be compromised by halogenated anesthetic agents, such as a liver disorder, or cardiac disorder. Acute intoxication with alcohol or narcotics may be worsened.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin, eyes and clothing. Do not breathe vapors, mist, or spray. Do not ingest. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations.

Notes to Physician: There is no specific antidote. Remove from contaminated environment and provide adequate ventilation and oxygenation. Skin irritation and allergic contact dermatitis have been reported. If allergic dermatitis develops, do not re-expose skin to compound. Follow normal clinical protocols for respiratory irritation, Central Nervous System (CNS) depression, skin irritation, dermatitis, allergic dermatitis. The risk of manifesting allergic skin conditions depends upon the concentration, duration, and frequency of exposure, and is dependent upon repeat exposure.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media: Use media appropriate for surrounding fire

Fire Fighting: Consider evacuation of personnel located downwind. Keep unnecessary people away, isolate hazard area and deny entry. 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. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Firefighters should wear a one piece, total-encapsulating suit of Viton® or Butyl

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coated nylon or equivalent. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode.

Hazardous Combustion Products: Thermal decomposition can lead to release of irritating gases and vapors:, Hydrogen chloride, Phosgene, Chlorine

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): No information available

Upper Flammability Level (air): No information available

Flash point: >200 °F

Auto-ignition Temperature: Not determined

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Evacuate unnecessary personnel to safe areas. Keep unnecessary and unprotected persons away. Isolate hazard area and deny entry. Evacuate surrounding area. When handling this material, wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS. Ensure adequate local exhaust ventilation. If spill occurs indoors, turn off heating and/or air conditioning systems to prevent vapors from contaminating entire building. Eliminate all sources of heat and ignition.

Environmental Precautions:

Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

Methods and Materials for Containment and Cleaning Up:

Completely contain spilled materials with dikes, sandbags, etc. Shut off ventilation system if needed. Ventilate closed spaces before entering. Keep in suitable, closed containers for disposal. Stop leak if possible without personal risk. Collect with appropriate absorbent and place into suitable container. Keep container tightly closed. Liquid material may be removed with a properly rated vacuum truck.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not taste or swallow. Avoid breathing vapor, mist, or spray. Use only in well-ventilated areas. Keep away from excessive heat and high energy sources such as ultraviolet light and welding arcs.

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Safe Storage Conditions:

Store and handle in accordance with all current regulations and standards. Consult local fire codes. Store in a cool, dry, well ventilated area. Keep container tightly closed and properly labeled. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:

Oxidizing agents, Acids, Bases

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**REGULATORY EXPOSURE LIMIT(S):**

This product does not contain any components that have regulatory occupational exposure limits (OEL's).

NON-REGULATORY EXPOSURE LIMIT(S):

This product does not contain any components that have advisory (non-regulatory) occupational exposure limits (OEL's); however, the manufacturer has established internal Recommended Exposure Level(s) [REL(s)] as noted below.

Recommended Exposure Limits (REL's) are non-regulatory occupational exposure limits that the manufacturer has established based on health effects data

Component	OXY REL8 hr TWA	OXY REL STEL	OXY REL Ceiling
1,1,2,3 - Tetrachloropropene 10436-39-2 (98-100)	0.15 mg/m ³ (0.02 ppm)	1.5 mg/m ³ (0.2 ppm)	-----

ENGINEERING CONTROLS: Use only in well-ventilated areas. Provide local exhaust ventilation where vapors, mist, spray, or aerosols may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear safety glasses with side-shields. Wear chemical safety goggles with a face shield to protect against eye and skin contact when appropriate. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin and Body Protection: Wear chemical resistant clothing and footwear to prevent skin contact. Solvent resistant boots, jackets, pants, headgear and full face protection should be worn where splashing is a possibility. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods. No permeation or degradation test data is available for this material. Consult PPE manufacturer for assistance in the selection of an appropriate type of protective clothing.

Hand Protection: Wear appropriate chemical resistant gloves. No permeation or degradation test data is available for this material. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove. Care must be taken not to contaminate bare hands when removing gloves.

Respiratory Protection: When exposure limits may be exceeded, wear respiratory equipment as per U.S. OSHA 29 CFR 1910.134, ANSI Z88.2 and good Industrial Hygiene practice. Organic vapor cartridges may be appropriate under certain conditions. A full facepiece air-purifying respirator may be used in concentrations up to 50X the

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acceptable exposure level. Positive pressure supplied air must be used when there is a potential for uncontrolled release or exposure to unknown concentrations. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	Clear liquid
Color:	Colorless
Odor:	Strong, Characteristic Odor
Molecular Weight:	179.86
Molecular Formula:	C ₃ H ₂ Cl ₄
Chemical Family:	Chlorinated Hydrocarbon
Decomposition Temperature:	No data available
Boiling Point/Range:	162 °C @ 743 torr
Freezing Point/Range:	No data available.
Melting Point/Range:	-11.7 (°C)
Vapor Pressure:	2.67 - 3.70 mmHg @ 25 °C
Vapor Density (air=1):	Greater than 1
Relative Density/Specific Gravity (water=1):	1.5498 @ 20 °C
Density:	12.92 lbs/gal @ 20 °C
Water Solubility:	1.77 e-03 mol/L
pH:	No data available
Volatility:	No data available
Evaporation Rate (ether=1):	No data available
Partition Coefficient (n-octanol/water):	2.32 - 3.27 @ 20°C
Flash point:	>200 °F
Flammability (solid, gas):	Not applicable
Lower Flammability Level (air):	No information available
Upper Flammability Level (air):	No information available
Auto-ignition Temperature:	Not determined
Viscosity:	No data available

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and pressures.

Reactivity: Not reactive under normal temperatures and pressures.

Possibility of Hazardous Reactions: Avoid heat, flames, sparks and other sources of ignition.

Conditions to Avoid:

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- (e.g., static discharge, shock, or vibration) -
- None known

Incompatibilities/ Materials to Avoid: Oxidizing agents; Acids; Bases

Hazardous Decomposition Products: Hydrogen chloride gas, Phosgene, Chlorine

Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

PRODUCT TOXICITY DATA: 1,1,2,3 - TETRACHLOROPROPENE - TECP (4CPe)

LD50 Oral: 620 mg/kg (Rat)	LD50 Dermal: 2100 mg/kg (Rabbit)	LC50 Inhalation: 1.5 mg/l (4 hr. - Rat) - dust/mist
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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:
1,1,2,3 - Tetrachloropropene 10436-39-2	350 mg/kg (Rat)	400 uL/kg (Rabbit)	1500 mg/m ³ (4 hr-Rat)

POTENTIAL HEALTH EFFECTS:

- Eye contact:** Severe eye irritation. Eye contact may cause irritation, pain, tearing, redness, swelling, and possible corneal damage.
- Skin contact:** Severe skin irritant. Skin contact may cause irritation and possible burns. May be absorbed through the skin causing results similar to ingestion.
- Inhalation:** Inhalation exposures may cause respiratory tract irritation, difficulty breathing, coughing, pulmonary edema. May cause Central Nervous System (CNS) depression (narcotic effects). Central Nervous System (CNS) effects are characteristic following inhalation of chlorinated hydrocarbons, and can range from lightheadedness, dizziness, drowsiness in low level exposures to loss of consciousness at high levels of exposure.
- Ingestion:** Harmful if swallowed. Ingesting this material may cause gastrointestinal irritation, nausea, vomiting, diarrhea.
- Chronic Effects:** Prolonged and repeated contact may cause eye damage and blindness, and may cause liver damage. May cause skin sensitization with repeated contact. Based on animal studies, TECP caused mononuclear cell leukemia in female rats. Based on animal data, this material is suspected to cause cancer. Suspected of causing

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genetic defects. Suspected of damaging fertility or the unborn child.

SIGNS AND SYMPTOMS OF EXPOSURE:

Listed below.

Inhalation (Breathing): It may cause irritation of the upper and lower airways, coughing, difficulty breathing (dyspnea), pulmonary edema. It may cause central nervous system depression (narcotic effects), which can result in drowsiness, dizziness, incoordination (disequilibrium, ataxia), headache, slurred speech, a variety of other symptoms.

Skin: When this material contacts skin it may cause redness, irritation, itching, burning sensation, rash, hives (acute or delayed contact urticaria), and/or allergic contact dermatitis. This chemical may be significantly absorbed through the skin, causing results similar to ingestion exposures.

Eye: Eye Irritation: Exposure to eyes may cause irritation, pain, tearing, redness, swelling, and possible corneal damage. May cause conjunctival redness and edema, and lid redness and edema. Edema may lead to blurred vision. Effects may be more serious with repeated or prolonged contact.

Ingestion (Swallowing): Ingestion is not a likely route of exposure. Exposure by ingestion may cause irritation, nausea, and vomiting. If ingestion occurs, effects may be similar to inhalation.

TOXICITY:

No human data is reported, and the symptom information is inferred from animal studies. No specific treatments have been identified.

CHRONIC TOXICITY:

In repeat dose inhalation studies, little systemic toxicity was observed, although irritation of the respiratory system was observed. In a 4-week subchronic inhalation study the NOAEL was <5ppm (based on irritation) whereas no effects were observed at this same concentration in a 13-week study. When administered by the oral route for 4 weeks, TECP caused significant toxicity at dose levels of 100 mg/kg and above. Hepatic necrosis and degeneration were observed at these levels. Liver Toxin (Hepatotoxin).

Interaction with Other Chemicals Which Enhance Toxicity: Combining with other solvents such as alcohol, volatile hydrocarbons, and halogenated hydrocarbons may be additive for central nervous depression effects.

GHS HEALTH HAZARDS:

GHS: ACUTE TOXICITY - ORAL: Category 4 - Harmful if swallowed.

GHS: ACUTE TOXICITY - DERMAL: Category 4 - Harmful in contact with skin.

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

GHS: CONTACT HAZARD - SKIN: Category 1 - Causes severe skin burns and eye damage.

Skin Absorbent / Dermal Route: Yes.

GHS: SENSITIZATION HAZARD: Skin Sensitizer Category 1 - May cause an allergic skin reaction.

CARCINOGENICITY COMMENT:

In a 2-year inhalation study, TECP produced what appears to be an increase in leukemia in female rats; however, only for those female rats exposed to the highest concentration level (15 ppm). In the Fischer 344 rat used in the referenced study, the control incidence of the mononuclear cell leukemia (MNCL) in National Toxicology Program studies is about 19-25%. Hence, the control incidence in referenced study is considered to be low, and possibly

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outside the range for the laboratory that conducted this study. Therefore, if the incidence of MNCL is related to TECP, the effect is not considered to be significant. The NOAEL from that study was 1.5 ppm.

MUTAGENIC DATA:

Category 2 - Suspected of causing genetic defects. TECP was mutagenic in Salmonella typhimurium strains TA100 with and without activation and in TA98 with activation. TECP was not mutagenic in Saccharomycete yeast (D4) with and without activation. TECP was not geneotoxic in a rat hepatocyte primary culture (HPC)/DNA repair assay or a hepatocyte cytotoxicity study in primary cultures.

REPRODUCTIVE TOXICITY:

Category 2 - Suspected of damaging fertility or the unborn child. TECP did not produce reproductive toxicity in rats exposed by inhalation, but it did cause maternal toxicity and possible developmental toxicity in rats treated with oral doses of 60 mg/kg and above.

Health Hazards Not Otherwise Classified

• MAY BE HARMFUL IF ABSORBED THROUGH SKIN

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:**Fish Toxicity:**

LC50 Rainbow trout: 0.93 mg/L (96 hr.) Bluegill sunfish: 1.0 mg/L (96 hr.)

Aquatic Toxicity:

Very toxic to aquatic organisms

Invertebrate Toxicity:

EC50 Daphnia magna: 1.3 mg/L (48 hour)

FATE AND TRANSPORT:

BIODEGRADATION: Half-life = 5.80 days.

PERSISTENCE: No data available.

BIOCONCENTRATION: Bioconcentration Factor (BCF) = 1.24.

BIOACCUMULATIVE POTENTIAL: No data available

MOBILITY IN SOIL: No data available.

ADDITIONAL ECOLOGICAL INFORMATION: This product is very toxic to fish and aquatic organisms. This product is very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

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Waste from material:

Reuse or reprocess, if possible. Dispose of in accordance with all applicable regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.

Container Management:

Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN2927
PROPER SHIPPING NAME: Toxic liquid, corrosive, organic n.o.s., (1,1,2,3-Tetrachloropropene)
HAZARD CLASS/ DIVISION: 6.1 (8)
PACKING GROUP: II
LABELING REQUIREMENTS: 6.1 (8)

MARINE POLLUTANT: Marine Pollutant

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

UN NUMBER: UN2927
SHIPPING NAME: Toxic liquid, corrosive, organic n.o.s., (1,1,2,3-Tetrachloropropene)
CLASS OR DIVISION: 6.1 (8)
PACKING/RISK GROUP: II
LABELING REQUIREMENTS: 6.1 (8)
CAN. MARINE POLLUTANT: Marine Pollutant

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):

Not regulated.

SARA EHS Chemical (40 CFR 355.30)

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Not regulated

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

Chronic Health Hazard, Acute Health Hazard

SARA HAZARD CATEGORIES ALIGNED WITH GHS (2018):

Health Hazard - Reproductive Toxin

Health Hazard - Skin Corrosive / Irritant

Health Hazard - Sensitizer

Health Hazard - Eye Corrosive / Irritant

Health Hazard - Mutagen

EPCRA SECTION 313 (40 CFR 372.65):

Not regulated

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

Not regulated

EPA'S CLEAN WATER AND CLEAN AIR ACTS:

Component	Clean Water Act - Priority Pollutants	CAA - ODS CLASS 1 AND CLASS 2	CAA - Volatile Organic Compounds (VOCs) in SOCM1	CAA - HON Rule - Organic HAPs	CAA - Hazard Air Pollutants	CAA - Urban HAPs List (Integrated Urban Strategy)	SNAP - Substitutes for ODS	EPA RMP Toxic or Flammable TPQ
1,1,2,3 - Tetrachloropropene 10436-39-2 (98-100)	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

NATIONAL INVENTORY STATUS

Component	TSCA Inventory	TSCA 12(b)	TSCA - Section 4	TSCA - Section 5	TSCA - Section 6	TSCA - Section 8	TSCA - 8(a) PAIR	TSCA - 8(d) IUR	TSCA - 8(a) CAIR
10436-39-2	Listed	Not Listed	Not listed	Not Listed	Not listed	Listed	Not listed	Not listed	Not listed

U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.**TSCA 12(b):** This product is not subject to export notification.**Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
1,1,2,3 - Tetrachloropropene 10436-39-2	Not Listed	Listed

STATE REGULATIONS**California Proposition 65:**

This product is not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact OxyChem Technical Services at 1-800-733-1165.

Component	California Proposition 65	California Proposition 65	California Proposition 65	Massachusetts Right to Know	New Jersey Right to Know	New Jersey Special Health

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	Cancer WARNING:	CRT List - Male reproductive toxin:	CRT List - Female reproductive toxin:	Hazardous Substance List	Hazardous Substance List	Hazards Substance List
1,1,2,3 - Tetrachloropropene 10436-39-2	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List
1,1,2,3 - Tetrachloropropene 10436-39-2	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

CANADIAN REGULATIONS

- This material is not listed on the Canadian Domestic Substance List (DSL)
- This product is listed on the Canadian Non-domestic Substance List (NDSL) which are substances that are not on the DSL but are listed on TSCA inventory in the United States. Substances that are not on the DSL but are listed on the NDSL are subject to new substance notification

Component	Canada - CEPA - Schedule I - List of Toxic Substances	Canada - NPRI	Canada - CEPA - 2010 Greenhouse Gases (GHG) Subject to Mandatory Reporting	Canadian Chemical Inventory:	NDSL:
1,1,2,3 - Tetrachloropropene	Not listed	Not Listed	Not Listed	Not Listed	Listed

WHMIS - Classifications of Substances:

- D1B - Poisonous and Infectious Material; Materials causing immediate and serious toxic effects - Toxic material
- D2A - Poisonous and Infectious Material; Materials causing other toxic effects - Very toxic material

WHMIS Hazard Class:

- D1B Toxic materials
- D2A Very toxic materials

SECTION 16. OTHER INFORMATION

Prepared by: Occidental Chemical Corporation - HES&S Product Stewardship Department

Rev. Date: 29-Nov-2017

Reason for Revision:

- Removed RESEARCH AND DEVELOPMENT USE ONLY
- Updated Product Use information: SEE SECTION 1
- Added or revised Precautionary Statements: SEE SECTION 2
- Added Health Hazards Not Otherwise Classified: Section 2 and 11
- Modified Exposure Limit information: SEE SECTION 8
- PHYSICAL AND CHEMICAL PROPERTIES (SECTION 9)
- Updated Transportation Information: SEE SECTION 14
- Added substance name to "proper shipping name" in SECTION 14

1,1,2,3 - TETRACHLOROPROPENE - TECP (4CPe)

SDS No.: M47046

SDS Revision Date: 29-Nov-2017

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- Added LOLI tables such as EPA'S Clean Water / Air Act, TSCA status, DHS, PSM, EPCRA, CERCLA, Federal Canadian: SEE SECTION 15
 - Revised California Proposition 65 Statement: SEE SECTION 15

IMPORTANT:

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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.

End of Safety Data Sheet