



2,3,4,6-TETRACHLOROPHENOL UNLABELED

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 07/01/2011

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Version: 2.0

ULM-2429

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Substance name : 2,3,4,6-TETRACHLOROPHENOL UNLABELED
EC Index-No. : 604-013-00-8
EC-No. : 200-402-8
CAS-No. : 58-90-2
Product code : ULM-2429
Formula : C6H2Cl4O

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.
50 Frontage Road
Andover, MA 01810
USA

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)
International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Aquatic Acute 1 H400 (M=10)
Aquatic Chronic 4 H413

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

T; R24/25
Xi; R36/38
N; R50
R53

Full text of R-phrases: see section 16

GHS-US classification

Acute Tox. 3 (Oral) H301
Acute Tox. 3 (Dermal) H311
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Aquatic Acute 1 H400
Aquatic Chronic 4 H413

Full text of H statements : see section 16

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Adverse physicochemical, human health and environmental effects

Liver, Eyes.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H301+H311 - Toxic if swallowed or in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P264 - Wash both hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor if you feel unwell.

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS06

GHS09

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H301+H311 - Toxic if swallowed or in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life
H413 - May cause long lasting harmful effects to aquatic life

Precautionary statements (GHS-US) :

P264 - Wash Both hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P310 - If swallowed: Immediately call a doctor
P302+P352 - If on skin: Wash with plenty of water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a doctor if you feel unwell
P321 - Specific treatment (see Hazardous component(s) for labeling on this label)
P322 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,3,4,6-TETRACHLOROPHENOL UNLABELED	(CAS-No.) 58-90-2 (EC-No.) 200-402-8 (EC Index-No.) 604-013-00-8	100	T; R24/25 Xi; R36/38 N; R50 R53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,3,4,6-TETRACHLOROPHENOL UNLABELED	(CAS-No.) 58-90-2 (EC-No.) 200-402-8 (EC Index-No.) 604-013-00-8	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 4, H413

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
2,3,4,6-TETRACHLOROPHENOL UNLABELED (Main constituent)	(CAS-No.) 58-90-2	100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 1, H400 Aquatic Chronic 4, H413

Full text of H-phrases: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area.
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing, give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Toxic if absorbed through skin. Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid breathing vapors, mist, gas. Avoid dust formation.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow to enter drains or water courses. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal.
Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store in a well-ventilated place. Keep container tightly closed.
Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves. Respiratory protection of the dependent type. Protective clothing.



Hand protection : Wear suitable protective clothing and gloves.
Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.
Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid.
Molecular mass : 231.89 g/mol
Color : Off-white.
Odor : No data available
Odor threshold : No data available
pH : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Melting point : 62 - 64 °C (144 - 147 °F)
Freezing point : No data available
Boiling point : 150 °C (302 °F) at 21 hPa (16 mmHg)
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : 7 hPa (5 mmHg) at 130.3 °C (266.5 °F); 1hPa (1 mmHg) at 100 °C (212 °F)
Relative vapor density at 20 °C : No data available
Relative density : No data available
Specific gravity / density : 1.839 g/cm³

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Solubility	: No data available
Log Pow	: 4.45
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable if stored under recommended conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Toxic if swallowed. Dermal: Toxic in contact with skin.

2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)	
LD50 dermal rabbit	250 mg/kg
ATE CLP (oral)	100.000 mg/kg body weight
ATE CLP (dermal)	250.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. No data available
Serious eye damage/irritation	: Causes serious eye irritation. No data available
Respiratory or skin sensitization	: Not available No data available
Germ cell mutagenicity	: Not classified
Carcinogenicity	: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
Reproductive toxicity	: Not available
Specific target organ toxicity – single exposure	: Not classified No data available
Specific target organ toxicity – repeated exposure	: Not classified No data available
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
IARC group	: 2B
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: Toxic if absorbed through skin. Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Toxic if swallowed.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

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LC50 fish 1	0.29 - 0.38 mg/l Oncorhynchus mykiss (rainbow trout) - 96 h
EC50 Daphnia 1	0.09 mg/l Daphnia magna (Water flea) - 48 h

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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Bioconcentration factor (BCF REACH)	588 - Oncorhynchus gorboscha
Log Pow	4.45

12.4. Mobility in soil

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Ecology - soil	Not available.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic organisms.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Product/Packaging disposal recommendations : Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No.(DOT) : 2020
DOT NA no. UN2020

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Chlorophenols, solid
Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison



Packing group (DOT) : III - Minor Danger

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DOT Special Provisions (49 CFR 172.102)	: IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2). IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 153
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 213
DOT Packaging Bulk (49 CFR 173.xxx)	: 240
DOT RQ	: 10 lbs
Marine pollutant	: No



14.3. Additional information

Other information : No supplementary information available.

Overland transport

Packing group (ADR)	: III
Class (ADR)	: 6.1 - Toxic substances
Hazard identification number (Kemler No.)	: 60
Classification code (ADR)	: T2
Hazard labels (ADR)	: 6.1 - Toxic substances



Orange plates	: 
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Tunnel restriction code (ADR)	: E
Limited quantities (ADR)	: 5kg
EAC	: 2X
Excepted quantities (ADR)	: E1

Transport by sea

DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
MFAG-No	: 153

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 100 kg
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DOT Quantity Limitations Cargo aircraft only (49 : 200 kg
CFR 175.75)

Civil Aeronautics Law : Toxic and infectious substances/Toxic substances

14.4. Environmental hazards

Dangerous for the environment :



Other information : No supplementary information available.

14.5. Special precautions for user

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

2,3,4,6-TETRACHLOROPHENOL UNLABELED (58-90-2)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

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Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

No additional information available

15.3. US State regulations

2,3,4,6-TETRACHLOROPHENOL UNLABELED(58-90-2)	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1

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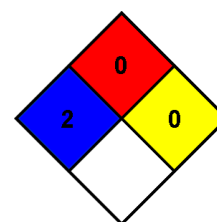
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Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
H301	Toxic if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H413	May cause long lasting harmful effects to aquatic life
R24/25	Toxic in contact with skin and if swallowed
R36/38	Irritating to eyes and skin
R50	Very toxic to aquatic organisms
R53	May cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
T	Toxic
Xi	Irritant

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 0 Minimal Hazard
- Physical : 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product