Dichlorophen SDS/MSDS (Safety Data Sheet)

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

* Product Name: Dichlorophen
* Catalog Number: S5724
* CAS Number: 97-23-4
* IUPAC Name: Phenol, 2,2'-methylenebis[4-chloro-

Relevant identified uses and uses advised against

* Identified uses: For research and development use only; laboratory chemicals; manufacture of substances.
* Uses advised against: Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

* Company: Selleck Chemicals
* TollFree: +1 877 796-6397
* Tel: +1 832 582-8158
* Fax: +1 832 582-8590

Emergency telephone number

* Emergency phone #: +1 832 582-8158

2. HAZARDS IDENTIFICATION

2.1 GHS classification in accordance with 29 CFR 1910 (OSHA HCS):

Flammable liquids: Category 3. H226
Acute toxicity (oral): Category 4. H302
Skin irritation: Category 2. H315
Skin sensitization: Category 1. H317
Serious eye damage: Category 1. H318
Serious eye irritation: Category 2. H319
Acute toxicity (inhalation): Category 4. H332
Specific target organ toxicity (single exposure): Category 3. H335
Acute aquatic toxicity: Category 1. H400
Chronic aquatic toxicity: Category 1. H410

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram(s)



Signal Word Danger

Hazard statement(s)	H226: Flammable liquid and vapor H302: Harmful if swallowed H315: Causes skin irritation H317: May cause an allergic skin reaction H318: Causes serious eye damage H319: Causes serious eye irritation H332: Harmful if inhaled H335: May cause respiratory irritation H400: Very toxic to aquatic life H410: Very toxic to aquatic life with long lasting effects
Precautionary statement(s)	None.
Prevention	P210: Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P264: Wash hands thoroughly after handling. P264+P265: Wash hands thoroughly after handling. Do not touch eyes. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Response	P301+P317: IF SWALLOWED: Get medical help. P302+P352: IF ON SKIN: wash with plenty of water. P303+P361: IF ON SKIN (or hair): Take off immediately all contaminated clothing. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351: IF IN EYES: Rinse cautiously with water for several minutes. P305+P354: IF IN EYES: Immediately rinse with water for several minutes. P317: Get emergency medical help. P319: Get medical help if you feel unwell. P321: Specific treatment (see information on this label and safety datasheet)). P330: Rinse mouth. P332+P317: If skin irritation occurs: Get medical help. P333+P317: If skin irritation or rash occurs: Get medical help. P337+P317: If eye irritation persists: Get medical help. P338: Remove contact lenses, if present and easy to do. Continue rinsing. P353: Rinse skin with water [or shower]. P362+P364: Take off contaminated clothing and wash it before reuse. P370+P378: In case of fire: Use water spray, dry chemical, carbon dioxide, or appropriate foam to extinguish. P391: Collect spillage.

Storage	P403+P233: Store in a well-ventilated place. Keep container tightly closed. P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.
Disposal	P501: P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Product name: Dichlorophen

CAS Number: 97-23-4

PubChem CID: 3037

Molecular formula: C13H10Cl2O2

Molecular weight: 269.12 g/mol

IUPAC name: 4-chloro-2-[(5-chloro-2-hydroxyphenyl)methyl]phenol

3.2 Mixtures

Not applicable (pure substance).

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation: INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to t

Skin contact: SKIN: IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, IMMEDIATELY call a physician and be prepared to transport the victim to a hospital for treatment.

Eye contact: EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.

Ingestion: INGESTION: DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. IMMEDIATELY transport

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 (Toxicological Information).

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact a poison control center or physician for severe exposure.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable: Dry chemical, carbon dioxide (CO_2), alcohol-resistant foam, water spray.

Unsuitable: High-pressure water jet (may spread fire).

5.2 Specific hazards arising from the substance or mixture

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. A water spray may also be used. (NTP, 1992)

5.3 Advice for firefighters

Wear self-contained breathing apparatus (SCBA) and full protective clothing.

Fight fire from upwind. Cool containers with water spray until fire is extinguished.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment (see Section 8).

Avoid breathing dust/vapor. Ensure adequate ventilation.

Evacuate personnel to safe areas. Keep people away from and upwind of spill.

6.2 Environmental precautions

Prevent product from entering drains, waterways, or soil.

Contain spill with inert absorbent material.

6.3 Methods and materials for containment and cleaning up

If a spill occurs, clean it up promptly. Don't wash it away. Instead, sprinkle the spill with sawdust, vermiculite, or kitty litter. Sweep it into a plastic garbage bag, and dispose of it as directed on the pesticide product label.

After Applying a Pesticide, Indoors or Outdoors. To remove pesticide residues, use a bucket to rinse tools or equipment three times, including any containers or utensils that you used when mixing the pesticide. Then pour the rinsewater into the pesticide sprayer and reuse the solution by applying it according to the pesticide product label directions. After applying any pesticide wash your hands and any other parts of your body that may have come in contact with the pesticide..To prevent tracking pesticides inside, remove or rinse your boots or shoes before entering your home. Wash any clothes that have been exposed to a lot of pesticide separately from your regular wash.

AEROBIC: Dichlorophene, present at 100 mg/L, reached 0% of its theoretical BOD in 4 weeks using an activated sludge inoculum at 30 mg/L and the Japanese MITI test(1). In another study, the initial rate of biodegradation of dichlorophene in sewage began rapidly (10-40 percent reduction after 1.5 days) and then slowed over a period of several days (20-55, 30-60, and 40-60 percent after 2.5, 3.5, and 7 days respectively)(2). Dichlorophene has been classified as a synthetic organic chemical unlikely to be removed during biological sewage treatment, even after prolonged exposure of the biota(3). Using a concentration of 10-20 mg/L, dichlorophene degraded 50 percent (aerobic) in an activated sludge test over a 2 week period(4).

SRP: The most favorable course of action is to use an alternative chemical product with less inherent propensity for occupational exposure or environmental contamination. Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier. Ultimate disposal of the chemical must consider: the material's impact on air quality; potential migration in soil or water; effects on animal, aquatic, and plant life; and conformance with environmental and public health regulations.

Safe Disposal of Pesticides. The best way to dispose of small amounts of excess pesticides is to use them - apply them - according to the directions on the label. If you cannot use them, ask your neighbors whether they have a similar pest control problem and can use them. If all of the remaining pesticide cannot be properly used, check with your local solid waste management authority, environmental agency, or health department to find out whether your community has a household hazardous waste collection program or a similar program for getting rid of unwanted, leftover pesticides. These authorities can also inform you of any local requirements for pesticide waste disposal.

Safe Disposal of Pesticides. An empty pesticide container can be as hazardous as a full one because of residues left inside. Never reuse such a container. When empty, a pesticide container should be rinsed carefully three times and the rinsewater thoroughly drained back onto the sprayer or the container previously used to mix the pesticide. Use the rinsewater as a pesticide, following label directions. Replace the cap or closure securely. Dispose of the container according to label instructions. Do not puncture or burn a pressurized container like an aerosol - it could explode. Do cut or puncture other empty pesticide containers made of metal or plastic to prevent someone from reusing them. Wrap the empty container and put it in the trash after you have rinsed it.

Wear the items of protective clothing the label requires: for example, non-absorbent gloves (not leather or fabric), rubber footwear (not canvas or leather), a hat, goggles, or a dust-mist filter. If no specific clothing is listed, gloves, long-sleeved shirts and long pants, and closed shoes are recommended. You can buy protective clothing and equipment at hardware stores or building supply stores.

Indoor Applications. If the label directions permit, leave all windows open and fans operating after the application is completed. If the pesticide product is only effective in an unventilated (sealed) room or house, do not stay there. Put all pets outdoors, and take yourself any your family away from treated areas for at least the length of time prescribed on the label. Apply most surface sprays only to limited areas such as cracks; don't treat entire floors, walls, or ceilings. Don't let pesticides get on any surfaces that are used for food preparation. Wash any surfaces that may have pesticide residue before placing food on them.

Indoor Applications. When using total release foggers to control pests, use no more than the amount needed and to keep foggers away from ignition sources (ovens, stoves, air conditioners, space heaters, and water heaters, for example). Foggers should not be used in small, enclosed places such as closets and cabinets or under tables and counters.

Outdoor Applications. Never apply pesticides outdoors on a windy day (winds higher than 10 mph). Position yourself so that a light breeze does not blow pesticide spray or dust into your face.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

SMALL SPILLS AND LEAKAGE: Should a spill occur while you are handling this chemical, FIRST REMOVE ALL SOURCES OF IGNITION, then you should dampen the solid spill material with 60-70% ethanol and transfer the dampened material to a suitable container. Use absorbent paper dampened with 60-70% ethanol to pick up any remaining material. Seal the absorbent paper, and any of your clothes, which may be contaminated, in a vapor-tight plastic bag for eventual disposal. Solvent wash all contaminated surfaces with 60-70% ethanol followed by washing with a soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

STORAGE PRECAUTIONS: You should keep this material in a tightly closed container under an inert atmosphere, and store it at refrigerated temperatures. (NTP, 1992)

Safe Storage of Pesticides. Always store pesticides in their original containers, complete with labels that list ingredients, directions for use, and first aid steps in case of accidental poisoning. Never store pesticides in cabinets with or near food, animal feed, or medical supplies. Do not store pesticides in places where flooding is possible or in places where they might spill or leak into wells, drains, ground water, or surface water.

Keep away from heat, sparks, and open flames. Use explosion-proof equipment.

7.2 Conditions for safe storage, including any incompatibilities

Safe Storage of Pesticides. Always store pesticides in their original containers, complete with labels that list ingredients, directions for use, and first aid steps in case of accidental poisoning. Never store pesticides in cabinets with or near food, animal feed, or medical supplies. Do not store pesticides in places where flooding is possible or in places where they might spill or leak into wells, drains, ground water, or surface water.

Store away from incompatible materials (see Section 10).

[Note: Specific storage temperature not available in public databases. Refer to supplier Certificate of Analysis (COA) for exact storage conditions.]

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure controls

8.1.1 Occupational exposure limits (OEL)

OSHA PEL: Not established.

ACGIH TLV: Not established.

NIOSH REL: Not established.

No occupational exposure limit values are established for this substance.

Use the lowest feasible exposure level (ALARA principle).

8.1.2 Appropriate engineering controls

Use only in a chemical fume hood or with local exhaust ventilation.

Ensure adequate ventilation to keep airborne concentrations below exposure limits.

8.2 Individual protection measures

8.2.1 Eye/face protection

Wear chemical safety goggles and face shield.

8.2.2 Skin protection

Wear protective gloves. Recommended material: Nitrile rubber.

Wear suitable protective clothing (lab coat).

8.2.3 Respiratory protection

Use NIOSH-approved dust/mist respirator (N95 or higher) if ventilation is inadequate.

8.2.4 Thermal hazards

Not applicable.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance: Dichlorophene appears as white slightly cream or light pink-colored powder. Melting point 177 °C. Slight phenolic odor and a saline phenolic taste. Moderately toxic. Used as a fungicide and bactericide.

b) Odor: Odorless

c) Odor threshold: No data available

d) pH: No data available

e) Melting point/freezing point: 351 to 352 °F (NTP, 1992)

f) Initial boiling point and boiling range: No data available

g) Flash point: No data available

h) Evaporation rate: No data available

i) Flammability (solid, gas): No data available

j) Upper/lower flammability or explosive limits: No data available
k) Vapor pressure: 1e-10 mmHg at 77 °F ; 0.0001 mmHg at 212 °F (NTP, 1992)
l) Vapor density: No data available
m) Relative density: No data available
n) Water solubility: less than 1 mg/mL at 72 °F (NTP, 1992)
o) Partition coefficient: n-octanol/water: Log P (n-octanol/water): 4.3
p) Auto-ignition temperature: No data available
q) Decomposition temperature: No data available
r) Viscosity: No data available
s) Explosive properties: No data available
t) Oxidizing properties: No data available

9.2 Other information

Topological Polar Surface Area (TPSA): 40.5 Å²
Complexity: 226

10. STABILITY AND REACTIVITY

10.1 Reactivity

No specific reactivity hazards identified under normal handling conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions under normal conditions.

10.4 Conditions to avoid

Avoid heat, sparks, open flames, direct sunlight, and moisture.
Avoid strong oxidizing agents, strong acids, and strong bases.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong bases.

10.6 Hazardous decomposition products

Thermal decomposition may produce: Carbon monoxide (CO), Carbon dioxide (CO□), Hydrogen chloride (HCl).
See also Section 5 (Fire-fighting measures) for combustion products.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

No acute toxicity data available.

Skin corrosion/irritation:

Causes skin irritation (H315).

Serious eye damage/eye irritation:

Causes serious eye damage (H318).

Respiratory or skin sensitization:

May cause an allergic skin reaction (H317).

Germ cell mutagenicity:

No data available.

Carcinogenicity:

No data available.

Reproductive toxicity:

No data available.

Specific target organ toxicity (single exposure):

No data available.

Specific target organ toxicity (repeated exposure):

No data available.

Aspiration hazard:

No data available.

11.2 Additional information

No additional toxicological information available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

LC50 Oncorhynchus mykiss (Rainbow trout) 800 ug/L/24 hr; renewal /formulated product/

LC50 Oncorhynchus mykiss (Rainbow trout) 540 ug/L/48 hr; renewal /formulated product/

LC50 Pimephales promelas (Fathead minnow, 30 days old, mean length 17.1 mm, mean weight 0.071 g) 310 ug/L/96 hr; flow-through, 24.5 °C, dissolved oxygen 7.4 mg/L, hardness 46.8 mg CaCO3/L, alkalinity 40.9 mg CaCO3/L, pH 7.6 /98% pure/

LC50 Rasbora heteromorpha (Harlequinfish) 600 ug/L/24 hr; renewal /formulated product/

For more Ecotoxicity Values (Complete) data for DICHLOROPHENE (10 total), please visit the HSDB record page.

/AQUATIC SPECIES/ 5 ppm of Panacide prolonged the lag phase, decreased the growth rate and final yield of the green alga, Scenedesmus obliquus. Synthesis of nucleic acid remained stationary over the first 2 days. Synthesis of RNA and DNA was slower than in controls. Treatment with 20 ppm completely ended algal growth and resulted in lysis of cells after 72 hr contact. Synthesis of chlorophyll was also affected.

Dichlorophene's production and use as an anthelmintic and an over the counter medication for the treatment of fungal infections may result in its release to the environment through various waste streams. Its former production and use in pesticide products as an algacide, fungicide, and bactericide resulted in its direct release to the environment. If released to air, a vapor pressure of 9.8X10-11 mm Hg at 25 °C indicates dichlorophene will exist solely in the particulate phase

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Log P (n-octanol/water): 4.3

Potential for bioaccumulation exists (Log P > 3).

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available.

12.6 Other adverse effects

This substance is classified as hazardous to the aquatic environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste Treatment Methods: Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers and do not mix with other waste. Handle uncleaned containers in the same manner as the product itself.

14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as dangerous goods (research quantities typically exempt).

14.2 UN proper shipping name

Not subject to transport regulations (small quantities for research use).

14.3 Transport hazard class(es)

Not classified as dangerous goods for transport (research quantities).

14.4 Packing group

Not applicable (not regulated as dangerous goods in typical research quantities).

14.5 Environmental hazards

Marine pollutant: Yes (classified as environmentally hazardous per GHS).

14.6 Special precautions for user

Transport in original packaging. Ensure containers are tightly sealed.

For bulk or commercial quantities, consult applicable transport regulations (DOT, IATA, IMDG).

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

Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US EPA / TSCA: Subject to EPA TSCA regulations

EU ECHA / REACH: Not available in public databases.

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:

Acute (short-term) health hazard

Environmental hazard

Fire hazard

Massachusetts Right To Know Components:

This material contains components subject to the Massachusetts Right to Know Act. See Section 2 for hazard classification.

Pennsylvania Right To Know Components:

This material contains components subject to the Pennsylvania Right to Know Act. See Section 2 for hazard classification.

New Jersey Right To Know Components:

This material contains components subject to the New Jersey Right to Know Act. See Section 2 for hazard classification.

California Prop. 65 Components:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Other regulatory listings:

- The Australian Inventory of Industrial Chemicals: Chemical: Phenol, 2,2'-methylenebis[4-chloro-

- California Safe Cosmetics Program (CSCP) Reportable Ingredient: Hazard Traits - Developmental Toxicity Authoritative List - Prop 65 Report - regardless of intended function of ingredient in the product

- California Safe Cosmetics Program (CSCP) Reportable Ingredient: Hazard Traits - Neurotoxicity Authoritative List - ATSDR Neurotoxicants Report - if used as a fragrance or flavor ingredient

- Status Regulation (EC): 2005/303

- TSCA Requirements: Pursuant to section 8(d) of TSCA, EPA promulgated a model Health and Safety Data Reporting Rule. The section 8(d) model rule requires manufacturers, importers, and processors of listed chemical substances and mixtures to submit to EPA copies and lists of unpublished health and safety studies. Dichlo

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this substance.

For research-use-only compounds, no CSA is required under REACH Annex I.

16. OTHER INFORMATION

Revision Date: 2026/09/09

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.