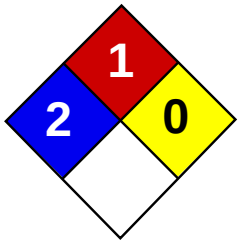

Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
2,4-Dichlorophenoxyacetic acid MSDS

Section 1: Chemical Product and Company Identification

Product Name: 2,4-Dichlorophenoxyacetic acid

Catalog Codes: SLD3454

CAS#: 94-75-7

RTECS: AG6825000

TSCA: TSCA 8(b) inventory: 2,4-Dichlorophenoxyacetic acid

CI#: Not applicable.

Synonym:

Chemical Name: 2,4-Dichlorophenoxyacetic acid

Chemical Formula: C8H6Cl2O3

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{2,4-}Dichlorophenoxyacetic acid	94-75-7	100

Toxicological Data on Ingredients: 2,4-Dichlorophenoxyacetic acid: ORAL (LD50): Acute: 375 mg/kg [Rat]. 347 mg/kg [Mouse]. 100 mg/kg [Dog]. DERMAL (LD50): Acute: 1400 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Extremely hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant), of eye contact (corrosive). Non-corrosive for skin. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching.

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (corrosive). CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH. MUTAGENIC EFFECTS: Classified POSSIBLE for human. Mutagenic for mammalians. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. The substance is toxic to kidneys, the nervous system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, eyes.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Do not use an eye ointment. Seek medical attention.

Skin Contact:
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion:
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), halogenated compounds.

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of open flames and sparks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of sodium carbonate.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of sodium carbonate. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up Keep container dry. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes Never add water to this product If ingested, seek medical advice immediately and show the container or the label.

Storage:
Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
United States: TWA: 10 (mg/m3) from OSHA (PEL) United States: TWA: 10 (mg/m3) from ACGIH (TLV) United States: TWA: 10 (mg/m3) from NIOSHConsult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Not available.

Taste: Not available.

Molecular Weight: 221.04 g/mole

Color: Beige. (Light.)

pH (1% soln/water): Acidic.

Boiling Point: Not available.

Melting Point: 138°C (280.4°F)

Critical Temperature: Not available.

Specific Gravity: 1.416 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: 3.13 ppm

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 2.8

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether, acetone.

Solubility:
Easily soluble in methanol. Soluble in acetone. Partially soluble in diethyl ether. Very slightly soluble in hot water, n-octanol. Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Slightly reactive to reactive with oxidizing agents.

Corrosivity:
Corrosive in presence of steel, of aluminum, of zinc, of copper. Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals:
Acute oral toxicity (LD50): 100 mg/kg [Dog]. Acute dermal toxicity (LD50): 1400 mg/kg [Rabbit].

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH. MUTAGENIC EFFECTS: Classified POSSIBLE for human. Mutagenic for mammalians. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. The substance is toxic to kidneys, the nervous system, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, eyes.

Other Toxic Effects on Humans:
Slightly hazardous in case of skin contact (irritant), of eye contact (corrosive). Non-corrosive for skin.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are as toxic as the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Phenoxy pesticide, solid, toxic (2,4-Dichlorophenoxyacetic acid) : UN2765 PG: III

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
Rhode Island RTK hazardous substances: 2,4-Dichlorophenoxyacetic acid Pennsylvania RTK: 2,4-Dichlorophenoxyacetic acid Florida: 2,4-Dichlorophenoxyacetic acid Minnesota: 2,4-Dichlorophenoxyacetic acid Michigan critical material: 2,4-Dichlorophenoxyacetic acid Massachusetts RTK: 2,4-Dichlorophenoxyacetic acid New Jersey: 2,4-Dichlorophenoxyacetic acid TSCA 8(b) inventory: 2,4-Dichlorophenoxyacetic acid TSCA 4(a) final test rules: 2,4-Dichlorophenoxyacetic acid TSCA 8(a) IUR: 2,4-Dichlorophenoxyacetic acid TSCA 12(b) one time export: 2,4-Dichlorophenoxyacetic acid SARA 302/304/311/312 hazardous chemicals: 2,4-Dichlorophenoxyacetic acid SARA 313 toxic chemical notification and release reporting: 2,4-Dichlorophenoxyacetic acid CERCLA: Hazardous substances.: 2,4-Dichlorophenoxyacetic acid: 100 lbs. (45.36 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R21/22- Harmful in contact with skin and if swallowed. R40- Possible risks of irreversible effects. R41- Risk of serious damage to eyes. R62- Possible risk of impaired fertility. R63- Possible risk of harm to the unborn child.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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