

Last Revision Date: 11/8/2013

SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Catalog Number: N-10609
Description: 2,4-Dichlorophenoxyacetic acid
Other Names: 2,4-D

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026
EMERGENCY PHONE: 1-610-692-3026

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS: 94-75-7
Description: 2,4-Dichlorophenoxyacetic acid
EINECS No: 202-361-1
Hazard Symbols: Xn

SECTION 3 - HAZARDS IDENTIFICATION

Contact lenses should not be worn in the laboratory.
All chemicals should be considered hazardous – Avoid direct physical contact!
Suspected Carcinogen-may produce cancer.
May be fatal if swallowed!
May be harmful if inhaled.
May be harmful if absorbed through the skin.
Can be irritating to mucous membranes.
Can cause cardiovascular system injury.
Exposure can cause liver damage.
Possible cholinesterase inhibitor. May cause seizures, nausea, vomiting, airway obstruction and/or increased mucous secretions in the lungs.
Can cause gastro-intestinal disturbances.
Dust and/or vapors can cause irritation to respiratory tract.
Can be irritating to mucous membranes.
Possible mutagen-May cause birth defects in future generations.
Possible teratogen; causes embryo-fetal damage.

SECTION 4 - FIRST AID MEASURES

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes.

If no burns have occurred-use soap and water to cleanse skin.

If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing.

If patient has stopped breathing administer artificial respiration.

If patient is in cardiac arrest administer CPR.

Continue life supporting measures until medical assistance has arrived.

If swallowed DO NOT induce vomiting.

Remove and wash contaminated clothing.

If patient is exhibiting signs of shock - Keep warm and quiet.

Get medical attention if necessary.

Do not wear shoes or clothing until absolutely free of all chemical odors.

Contact Poison Control Center immediately if necessary.

Do not administer liquids or induce vomiting to an unconscious or convulsing person.

If patient is vomiting-watch closely to make sure airway does not become obstructed by vomit.

SECTION 5 - FIRE AND EXPLOSION DATA

Flash Point: N/A
Extinguishing Media: Carbon dioxide, dry chemical powder or spray.
Upper Explosion Limit: N/A
Lower Explosion Limit: N/A
Auto Ignition: 180°C
NFPA Hazard Rating: Health: 2 Flammability: 0 Reactivity: 0 Special: N/A
(Scale: 0 = Least, 1 = Slight, 2 = Moderate, 3 = High, 4 = Severe)

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Absorb on vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal.
Wash contaminated surfaces to remove any residues.
Remove contaminated clothing and wash before reuse.

SECTION 7 - HANDLING AND STORAGE*Handling:*

This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

Storage:

Store in a cool dry place. Store only with compatible chemicals. Keep tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (TWA): 10 mg/m³
ACGIH TLV (TWA): 10 mg/m³
ACGIH TLV (STEL): N/A

Personal Protective Equipment

Eyes: Wear safety glasses.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to minimize contact with skin.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Color: Colorless
Phase: Crystalline solid
Melting Point: 136-140°C
Boiling Point: 385°C
Density: N/A
Evaporation Rate (Butyl acetate-1): N/A
Vapor Pressure: 0.4 mm @ 160°C
Vapor Density: 7.63
Odor: Phenol like
Solubility in water: Insoluble (immiscible)
Molecular Weight: 221.04
Molecular Formula: C₈H₆Cl₂O₃

SECTION 10 - STABILITY AND REACTIVITY

Incompatible with strong oxidizing agents.
Sensitive to light - dark color does not affect purity.
Sensitive to heat.
Decomposition liberates toxic fumes.
Decomposition products are corrosive.

SECTION 11 - TOXICOLOGY INFORMATION

RTECS: AG6825000
Oral Rat or Mouse LD50: 370mg/kg
Dermal Rat or Mouse LD50: 1500mg/kg
Rat or Mouse LC50: N/A

Carcinogenicity

OSHA: No IARC: No NTP: No ACGIH: No NIOSH: No Other: Yes

California Proposition 65 info: Not Listed

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not Available
Environmental Fate: Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

UN Number: UN3077
Class: 9
Packing Group: III
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (2,4-Dichlorophenoxyacetic acid)

SECTION 15 - REGULATORY INFORMATION

European Labeling in Accordance with EC Directives

Hazard Symbols: Xn
Risk Phrases: R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety Phrases: S24/25/26 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S36/37 Wear suitable protective clothing and gloves.
S39 Wear eye/face protection.
S46 If swallowed seek medical advice immediately and show this container or label.
S61 Avoid release to the environment.

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident,

an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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