

2,4-DICHLOROPHENOXYACETIC ACID

SECTION 1: PRODUCT IDENTIFICATION

Product Name: 2,4-DICHLOROPHENOXYACETIC ACID

Product Code: 2590

CAS#: 94-75-7

Chemical Formula: C₈H₆Cl₂O₃

Molecular Formula: 221.04

Synonyms : 2,4-D

Chemical Formula: KCl

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: 2,4-Dichlorophenoxyacetic acid

Toxicological Data on Ingredients: Acute Tox. 4; Eye Dam. 1; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 3; H302, H318, H317, H335, H400, H412

SECTION 3: HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

Serious eye damage (Category 1), H318

Skin sensitization (Category 1), H317

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 3), H412

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled If breathed in: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delay: No data available

Indication of any immediate medical attention and special treatment needed: No data available

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water Foam Carbon dioxide (CO₂) Dry powder

Special hazards arising from the substance or mixture:

Carbon oxides

Hydrogen chloride gas

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Advice for firefighters:

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by



keeping a safe distance or by wearing suitable protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers

SECTION 7: HANDLING AND STORAGE

Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

Storage conditions

Tightly closed. Dry.

Light sensitive.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance Form	: crystalline
Odour	: Not available
Taste	: Not available
Molecular Weight	: Not available
Colour	: light brown
pH	: Not available
Boiling Point	: Not available
Melting Point	: Melting point/range: 136 - 140 °C
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available



Vapor Density	: Not available
Volatility	: Not Available
Odor Threshold	: Not Available
Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Not available

SECTION 10: STABILITY AND REACTIVITY DATA

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

No data available

Conditions to avoid

no information available

Incompatible materials

Strong oxidizing agents, Copper, Iron
and iron salts.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - Mouse - 347 mg/kg

Remarks: (RTECS)

LD50 Oral - Rat - 375 mg/kg

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

Laboratory experiments have shown teratogenic effects.

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity



Toxicity to fish LC50 - Salmo salar (Atlantic salmon) - 100 mg/l - 96,0 h
 Toxicity to daphnia EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
 and other aquatic invertebrates
 Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 0,024 - 0,026 mg/l - 96 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

UN number:

ADR/RID: 3077

IMDG: 3077

IATA: 3077

UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4 dichlorophenoxyacetic acid; 2,4-D (ISO))

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4-dichlorophenoxyacetic acid; 2,4-D (ISO))

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,4-dichlorophenoxyacetic acid; 2,4-D (ISO))

Transport hazard class (es):

ADR/RID: 9

IMDG: 9

IATA: 9

Packaging group:

ADR/RID: III

IMDG: III

IATA: III

Environmental hazards:

ADR/RID: Yes

IMDG Marine pollutant: Yes

IATA: Yes

SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information: This safety datasheet complies with the requirements of Regulation (EC) No.1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture no data available

Chemical Safety Assessment For this product a chemical safety assessment was not carried out

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.



H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Other Special Considerations: Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.