# 2,4-DICHLOROPHENOXYACETIC ACID

## SECTION 1: PRODUCT IDENTIFICATION

Product Name: 2,4-DICHLOROPHENOXYACETIC ACID
Product Code: CM 23,385
CAS#: 94-75-7
Chemical Formula: $C_8H_6Cl_2O_3$
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: FIRSTAID 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 ANDCHEMICAL PROPERTIES

| | |
|---|---|
| Physicalstate 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 |
| CriticalTemperature | :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 and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
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.