

SAFETY DATA SHEET

| Version: | 1.1 |
|----------------|------------|
| Revision Date: | 2016-09-13 |
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

| Product Number: | M0136 |
|------------------|----------------|
| Product name: | MCPA-thioethyl |
| CAS Registry Nr: | 25319-90-8 |

1.2 Relevant identified uses of the substance or mixture and uses advised against

Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

| Company: | Chemodex AG | |
|----------|---------------------------|--|
| | CH - 9000 St. Gallen | |
| | Switzerland, Europe | |
| | Tel: +41 71 244 48 25 | |
| | Fax: +41 71 244 48 26 | |
| | Email: info@chemodex.com | |
| | Website: www.chemodex.com | |

1.4 Emergency telephone number

| Tox Info Suisse: | +41 44 251 51 51 |
|------------------|------------------|
|------------------|------------------|

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

| Acute toxicity, Oral (Category 4) | H302 |
|---------------------------------------|------|
| Acute aquatic toxicity (Category 1) | H400 |
| Chronic aquatic toxicity (Category 1) | H410 |

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

| Pictogram | |
|-------------|---------|
| Signal word | Warning |

Hazard statement(s)

| H302 | Harmful if swallowed. |
|------|---|
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| P264 | Wash skin thoroughly after handling |
|-------------|---|
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P330 | Rinse mouth. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

| Formula: | C11H13CIO2S |
|-------------------|-------------|
| Molecular Weight: | 244.7 g/mol |
| CAS-No.: | 25319-90-8 |

| Component | Classification | Concentration |
|----------------|---|---------------|
| MCPA-thioethyl | | |
| | Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H302, H410 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 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. For personal protection see section 8.

6.2 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.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 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

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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

| a) | Appearance: | Form: Needles, crystalline Colour: white |
|----|--|---|
| b) | Odour: | No data available |
| c) | Odour Threshold: | No data available |
| d) | pH: | No data available |
| e) | Melting point/freezing point: | 41 - 42 °C (106 - 108 °F) |
| f) | Initial boiling point and boiling range : | 165 °C (329 °F) at 9 hPa (7 mmHg) |
| 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) | Vapour pressure: | No data available |
| I) | Vapour density: | No data available |
| m) | Relative density: | 1.291 g/cm3 |
| n) | Water solubility: | 0.00023 g/l at ca.20 °C (68 °F) |
| o) | Partition coefficient (n- octanol/water): | log Pow: 4.45 at 20 °C (68 °F) |
| 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 |

9.1 Information on basic physical and chemical properties

| 9.2 Other safety i | information |
|--------------------|-------------|
|--------------------|-------------|

| Solubility in other solvents | Methanol 144 g/l |
|------------------------------|------------------|
|------------------------------|------------------|

SECTION 10: Stability and reactivity

10.1 Reactivity

Decomposes by reaction with alkaline solutions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Hydrogen chloride gas Other decomposition products - no data available In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

| Acute toxic | city |
|-------------|---|
| LD50 Oral - | rat - 790 mg/kg |
| Inhalation: | no data available |
| Dermal: no | data available |
| no data ava | ilable |
| Skin corro | sion/irritation |
| No data ava | ailable |
| Serious ey | e damage/eye irritation |
| No data ava | ailable |
| Respirator | y or skin sensitisation |
| No data ava | ailable |
| Germ cell I | nutagenicity |
| No data ava | ailable |
| Carcinoge | nicity |
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified |

| | as a carcinogen or potential carcinogen by ACGIH. |
|------------|--|
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified |
| | as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified |
| | as a carcinogen or potential carcinogen by OSHA. |
| Reprodu | ctive toxicity |
| No data a | vailable |
| Specific t | arget organ toxicity - single exposure |
| No data a | vailable |
| Specific t | arget organ toxicity - repeated exposure |
| No data a | vailable |
| Aspiratio | n hazard |
| No data a | vailable |
| Additiona | al Information |
| RTECS: N | Not available |
| To the be | st of our knowledge, the chemical, physical, and toxicological properties have not been |
| thoroughl | y investigated. |
| | |

SECTION 12: Ecological information

12.1 Toxicity

| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.3 mg/l - 96 h |
|---|--|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.58 mg/l - 48 h |

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

| UN number: 3077 | Class: 9 | Packing group: | III |
|-----------------------|--|----------------|----------|
| | | EMS-No: | F-A, S-F |
| Proper shipping name: | ENVIRONMENTALLY H N.O.S. (S-Ethyl (4-chloro | | |
| Marine pollutant: | Marine pollutant | | |

ΙΑΤΑ

| UN number: 3077 | Class: 9 | Packing group: III |
|-----------------------|--|---|
| Proper shipping name: | Environmentally hazardo (4-chloro-2methylpheno» | us substance, solid, n.o.s. (S-Ethyl xy)ethanethioate) |

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 15: Regulatory information

SARA 302 Components

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

SARA 313 Components

SARA 313: 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 Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

S-Ethyl (4-chloro-2-methylphenoxy)ethanethioate

CAS-No. 25319-90-8

New Jersey Right To Know Components

S-Ethyl (4-chloro-2-methylphenoxy)ethanethioate CAS-No. 25319-90-8

California Prop. 65 Components

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

SECTION 16: Other information

| Acute Tox. | Acute toxicity |
|------------------------|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H302 | Harmful if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| HMIS Rating | |
| Health hazard: | 1 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard: | 0 |
| NFPA Rating | |
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |
| | |

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

Further information

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