## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**1.1. Product identifier**

Trade Name:

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

| | |
|---|---|
| Identified uses: | Fungicide |
| Uses advised against: | You must not use for other purposes other than those described in the product. |

**1.3. Details of the supplier of the safety data sheet**

| | |
|---|---|
| Supplier: | **INDUSTRIAS QUIMICAS DEL VALLÉS, S.A.** |
| Address: | Av. Rafael Casanova, 81<br>08100 – Mollet del Vallés ( Barcelona) - Spain |
| Telephone number: | (34) 935.796.677 |
| Fax: | (34) 935.791.722 |
| E-mail address for a competent person responsible for the safety data sheet: | fsegur@iqvagro.com |
| **1.4. Emergency telephone number** | (00 34) 935.796.677 |
| Availability: | (8:00 AM - 17:00 PM EST) |
| Other comments: | No information available. |

## SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

**CLP Classification table**

**Classification according to Regulation (EC) 1272/2008**

| Hazard Classes/ categories | Hazard statement(s) | M-Factors |
|---|---|---|
| Aquatic Chronic 1 | H302 | No information available. |
| Aquatic Acute 1 | H332 | |
| Acute Tox. 4 | H410 | |

**DSD/DPD Classification table**

**Classification according to directives 67/548/EEC and 1999/45/EC**

**Categories of danger : Risk Phrases**

Xn,N: R20/22-50/53

Harmful by inhalation. Harmful if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| | |
|---|---|
| **Other information :** | The full text of the R-phrases, indications of danger (H) and additional indications of danger (EUH) can be found in section 16, |

**Most important adverse physicochemical, human health and environmental effects**

| | |
|---|---|
| **Adverse physicochemical effects :** | No information available. |
| **Adverse human health effects :** | Harmful by inhalation. Harmful if swallowed. |
| **Adverse environmental effects :** | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

**2.2. Label elements**

**Labelling according to directives 67/548/EEC and 1999/45/EC**

Symbol(s) of danger - Indication(s) of danger

N: Dangerous for the environment

Xn: Harmful

Risk Phrases

R20: Harmful by inhalation.

R22: Harmful if swallowed.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S 2: Keep out of the reach of children.

S13: Keep away from food, drink and animal feedingstuffs.

S25: Avoid contact with eyes.

S36: Wear suitable protective clothing.
S37: Wear suitable gloves.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Authorisation REACH number(s) : Not applicable

**2.3. Other hazards**

Compliance with PBT/vPvB criteria : There are no risks in accordance with Regulation 1999/45 of the EC or not classified as PBT or vPvB

Other hazards which do not result in classification : The substance/mixture is not classified as SVHC.

**2.4. Phrases for special risks. :** No information available.

## SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Chemical name | Content (%) | EC number | CAS Number | Classification Regulation (EC) 1272/2008 | Hazard statement(s)* | Classification (Directive 67/548/EEC)* |
|---|---|---|---|---|---|---|
| COPPER OXYCHLORIDE TECHNICAL | 62.2 % w/w | 215-572-9 | 1332-40-7 | Aquatic Chronic 1;Aquatic Acute 1;Acute Tox. 4 | H302;H332;H410 | Xn,N: R20/22-50-51/53 |

(*) See the full text of the hazard statements and risk phrases in section 16.

Composition (%) : Copper Oxychloride (1250 g/l, eq. 70% exp. as Cu w/v)

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

General notes: If symptoms persists, call a physician.

In case of inhalation: If symptoms are experienced remove source of contamination or move victim to fresh air. Obtain medical advice.

In case of contact with skin: Wash with soap and water. Get medical attention if irritation develops.

In case of contact with eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

En case of ingestion:: If irritation or discomfort occur, obtain medical advice.

Recommendations for first aid responders: Use suitable protective clothing

**4.2. Most important symptoms and effects, both acute and delayed**

Most important symptoms and effects, both acute and delayed: Burning pain in the mouth and pharynx, nausea, watery and bloody stools, diarrhea, decrease in blood pressure. Risk of renal and hepatic alterations

**4.3. Indication of any immediate medical attention and special treatment needed**

Indication of any immediate medical attention and special treatment needed: Not determinated

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

Suitable extinguishing media: Use dry chemical, CO2, water spray (fog) or foam. Collect contaminated fire-fighting water separately. It must not enter the sewage system.

Unsuitable extinguishing media: Water jet from high flow (due to risk of contamination).

**5.2. Special hazards arising from the substance or mixture**

Hazardous combustion products: Not known.

Other specific hazards: Not known.

**5.3. Advice for firefighters**

Advice for firefighters: Wear suitable protective clothing and dust mask with filter for chemicals.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---|---|
| For non-emergency personnel: | Avoid contact with mouth, eyes and skin<br>Wear suitable protective clothing and gloves to prevent contamination<br>Keep unauthorised people, children and animals away from the spillage area |
| For emergency responders: | Not available |

### 6.2. Environmental precautions

| | |
|---|---|
| Environmental precautions: | Keep out of waterways. |

### 6.3. Methods and material for containment and cleaning up

| | |
|---|---|
| Containment: | Construction of barriers of protection, drains and coating methods. |
| Cleaning: | Cover the product with sawdust, sand or dry land, sweep it, insert it into a dry container, cover it, identify it and dispose in an authorized place. |
| Other information: | Do not use brushes or compressed air to clean surfaces or clothing |

### 6.4. Reference to other sections

| | |
|---|---|
| Reference to other sections: | No information available. |

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

| | |
|---|---|
| Containment and measures to prevent fire: | The job and the methodology should be organized in such a way that direct contact with the product is minimized or prevented. Handle with care. Workspaces Use with adequate ventilation and safety showers presence next. |
| Measures to prevent aerosol and dust generation: | Avoid spills and leaks |
| Measures to reduce the release of the substance or mixture to the environment: | No information available. |
| Advice on general occupational hygiene: | No information available. |

### 7.2. Conditions for safe storage, including possible incompatibilities

| | |
|---|---|
| Technical measures and storage conditions: | Store the product in its original container, closed and tagged, in cool, dry, ventilated and away from food, beverages and feed. Keep out of reach of children, animals and unauthorized personnel |
| Packaging materials: | - |
| Requirements for storage rooms and vessels: | Storage Keep container closed after use. Avoid high temperatures and frost. |
| Further information on storage conditions: | No data available |

### 7.3. Specific end use(s)

| | |
|---|---|
| Recommendations: | The product is for plant protection use. |
| Industrial sector specific solutions: | - |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No DNEL data.

| | |
|---|---|
| Information on monitoring procedures: | Not available |
| Currently recommended monitoring methods: | Not available |
| Specific monitoring standards: | No information available. |

There are not data of PNEC

| | |
|---|---|
| Control banding approach ("control banding"): | Good industrial hygiene practices |

### 8.2. Exposure controls

| | |
|---|---|
| **Appropriate engineering controls:** | - |
| Appropriate exposure control measures related to the identified use(s) of the substance or mixture: | - |
| Structural measures to prevent exposure: | No information available. |
| Organisational measures to prevent exposure: | No information available. |

| | |
|---|---|
| Technical measures to prevent exposure: | No information available. |

**Individual protection measures, such as personal protective equipment**

| | |
|---|---|
| Eye/Face protection: | Avoid contact.<br>safety glasses with side-shields |
| Hand Protection: | Wear gloves. (Dexter CE 95 0072 4121 according to EEC/89/686). After use, wash with soap and water. |
| Others: | Mittens, boots or mono depending on the hazards associated with the substance or mixture and the possibilities of contact. |
| Respiratory Protection: | In case of insufficient ventilation use respiratory equipment while preparing the mixture.<br>(Affinity FR FFP1 D - CE 0121 according to EN 149:2001)<br>Do not breathe dust.<br>full-face mask |
| Thermal hazards: | Not available |
| Skin Protection | Wear suitable clothing to avoid repeated or delayed contact with skin. Thoroughly wash working clothes daily. After use, wash with soap and water. |

**Environmental exposure controls**

| | |
|---|---|
| Appropriate exposure control measures related to the identified use(s) of the substance or mixture: | No information available. |
| Structural measures to prevent exposure: | No information available. |
| Organisational measures to prevent exposure: | No information available. |
| Technical measures to prevent exposure: | No information available. |

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance: | Viscous liquid Green |
| Odour: | odourless |
| Odour threshold: | No data available |
| pH-value at 1%: | 6.5 - 8.5 (20 °C) |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range: | No data available |
| Flash point: | >61 °C |
| Evaporation Rate: | No data available |
| Flammability (solid, gas): | Non-flammable |
| Upper/lower flammability or explosive limits: | No data available |
| Vapour pressure: | No data available |
| Vapour density: | No data available |
| Relative density: | 1.9 - 2 g/ml (20 °C) |
| Solubility (is): | Water solubility: insoluble<br>Fat solubility: insoluble in the most common |
| Partition coefficient: n-octanol/water: | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | 200 °C |
| Viscosity: | No data available |
| Explosive properties: | Non-explosive |
| Oxidising properties: | No data available |

**9.2. Other information**

| | |
|---|---|
| Other information: | No data available |

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

| | |
|---|---|
| Reactivity: | No data available |

**10.2. Chemical stability**

| | |
|---|---|
| Chemical stability: | Stable to light, humidity and heat. Stable under normal conditions of storage for a minimum of 2 years |

**10.3. Possibility of hazardous reactions**

| | |
|---|---|
| Possibility of hazardous reactions: | No data available |

**10.4. Conditions to Avoid**

Conditions to Avoid: Corrosive in the long term to iron metals and alloys in presence of water/humidity.

**10.5. Incompatible materials**

Incompatible materials: Acids and ammonium salts partially dissolve the product

**10.6. Hazardous decomposition products**

Hazardous decomposition products: Copper oxychloride decomposes at temperatures above 200 ° C producing acid hydrochloric (HCL). Other hazardous decomposition products that may occur are the oxides of sulphur (SOx) and carbon (COx).
It does not decompose if stored and applied as directed.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

| **11.1.2. Mixtures** | | **Results**<br>COPPER OXYCHLORIDE TECHNICAL |
|---|---|---|
| Acute toxicity | Ingestion: LD50 | 950 - 1862 mg/Kg ·Rat |
| | Inhalation: LC50 | 2.83 mg/l ·Rat/4h |
| | Skin: LD50 | >2000 mg/Kg ·Rat |
| Irritation: | | Skin: Non irritant (rabbit)<br>Eye: Slight eye irritation (rabbit) |
| Corrosivity: | | No information available. |
| Sensitisation: | | Non sensitizer (Guinea pig) |
| Repeated dose toxicity: | | No information available. |
| Carcinogenicity: | | Not applicable. Copper is widely present in all food, feedingstuffs and water. |
| Mutagenicity: | | Not applicable. Copper is widely present in all food, feedingstuffs and water. |
| Toxicity for reproduction: | | Not applicable. Copper is widely present in all food, feedingstuffs and water. |

Information on likely routes of exposure: There is no evidence of symptoms associated with this substance/mixture
Main effects: No data available
Delayed and immediate effects as well as chronic effects from short and long-term exposure: No information available.
Interactive effects: No information available.
Other information: No information available.

## SECTION 12: Ecological information

**12.1. Toxicity**

**Acute toxicity (short-term)**

Fishes: Copper Oxychloride technical: EC50/ *O.Mykiss* / 96 h >43.8 mg/l
Crustaceans: No information available.
Algaes: No information available.
Other aquatic plants: No information available.
Micro-organisms: No information available.
Macro-organisms: No information available.

***Environmental toxicity***

Birds: No information available.
Bees: No information available.
Plants: No information available.

**Chronic (long-term) toxicity**

Fish: No information available.
Crustaceans: No information available.
Algae: No information available.
Other aquatic plants: No information available.
Microorganisms: No information available.
Macroorganisms: No information available.

***Environmental toxicity***

Birds: No information available.
Bees: No information available.
Plants: No information available.

**12.2. Degradability**

| | |
|---|---|
| Abiotic Degradation: | No information available. |
| Physical- and photo-chemical elimination: | No information available. |
| Biodegradation: | No information available. |
| Other processes: | Copper is strongly absorbed by soils, and it does not degrade. |

**12.3. Bioaccumulative potential**

| | |
|---|---|
| Partition coefficient n-octanol /water (Kow): | No information available. |
| Bioconcentration factor (BCF): | Copper does not bioaccumulate. Organisms excrete copper naturally. |

**12.4. Mobility in soil**

| | |
|---|---|
| Known or predicted distribution to environmental compartments: | Copper that is added to the soil mainly becomes bound to organic material. The content of organic material in the soil and the pH determine the degree of copper availability. Through the strong bounding to various soil components, the leaching out of copper is extremely low. Mobility in soil towards deeper layers is negligible. |
| Surface tension: | No information available. |
| Adsorption/Desorption: | No information available. |

**12.5. Results of PBT and vPvB assessment**

| | |
|---|---|
| Results of PBT and vPvB assessment: | This mixture does not contain any substance that has been assessed as PBT or vPvB |

**12.6. Other adverse effects**

| | |
|---|---|
| Other adverse effects: | No information available. |
| Environmental fate: | No information available. |
| Photochemical ozone creation potential: | No information available. |
| Ozone depletion potential: | No information available. |
| Endocrine disrupting potential: | No information available. |
| Global warming potential: | No information available. |

**12.7. Other information**

| | |
|---|---|
| Other information: | No information available. |

**12.8. Ecotoxicity**

| | |
|---|---|
| Ecotoxicity: | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

**12.9. Toxicological effects**

| | |
|---|---|
| Toxicological effects: | No data available |

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

| | |
|---|---|
| Appropiate methods of waste treatment of both substance or mixtures: | Waste should not be removed through the sewer. The elimination will be followed according to local, State or nationa provisions, either by incineration or recycling. |
| Appropiate methods of waste treatment of contaminated packaging: | The elimination will be followed according to local, State or national provisions. Either by incineration or recycling. |
| Waste codes / waste designations according to LoW: | No information available. |
| Appropiate methods of waste treatment of both substance or mixtures: | No information available. |
| Appropriate methods for the elimination of contaminated packaging: | No information available. |
| Special precautions: | No information available. |
| Community/national/regional provisions relating to waste management: | No information available. |
| Community/national/regional provisiones relating to waste: | The elimination will be followed according to local, State or national provisions. |

## SECTION 14: Transport information

**ADR/RID**

| | |
|---|---|
| UN Number: | UN3082 |
| Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains COPPER OXYCHLORIDE TECHNICAL) |

| | |
|---|---|
| Class: | 9 |

| | |
|---|---|
| ADR/RID Classification: | M6 |
| Packing group: | III |
| Label: | 9 |
| Special Provisions: | 274,335,601 |
| Limited Quantities: | 5 L |
| Packing Instructions: | P001,IBC03,LP01,R001 |
| Special Packing Provisions:: | - |
| Hazard identification number: | 90 |
| Kemler Code: | 000 |

**IMDG**

| | |
|---|---|
| Marine Pollutant: | Yes |
| UN Number: | UN3082 |
| Packing group: | - |
| Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains COPPER OXYCHLORIDE TECHNICAL) |
| Class: | - |
| Label: | - |
| EmS Guide: | F-A, S-F |

**IATA**

| | |
|---|---|
| UN Number: | UN3082 |
| Packing group: | - |
| Proper Shipping Name: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains COPPER OXYCHLORIDE TECHNICAL) |
| Class: | - |
| Label: | - |

## SECTION 15: Regulatory information

EU regulations

| | |
|---|---|
| Phytosanitary Registration Number.: | A plant protection registration number has not been declared. |
| Use authorizations: | No information available. |
| Use restrictions: | The substance has no restriction of use. |
| Other EU regulations: | No information available. |
| Information on emission of volatile organic compounds (VOC): | No information available. |
| National regulations: | No information available. |

**15.2. Chemical safety assessment**

| | |
|---|---|
| Chemical safety assessment: | No information available. |

## SECTION 16: Other information

**Labelling according to Regulation (EC) 1272/2008**

**Signal word**
Warning

**Hazard statement(s)**
H302 Harmful if swallowed.
H332 Harmful if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s)**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P270 Do no eat, drink or smoke when using this product.
P271 Use only outdoors or in a well ventilated area.
P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P391 Collect spillage.
P501 Dispose of contents/containers in accordance with local/regional/national/ international regulations

EUH401: To avoid risks to human health and the environment, comply with the instructions for use.

Reason for revision:N/A

| | |
|---|---|
| Changes to the previous version: | Format adaptation to the REACH Regulation amendment, the Regulation (EC) 453/2010. |
| Abbreviations and acronyms: | SDS: Safety Data Sheet<br>OEL: Occupational Exposure Limit<br>NACE: Nomenclature Générale des Activités Économiques dans les Communautés Européennes (French, EU classification system)<br>TRGS: Real Time Gross Settlement<br>OECD: Organisation for Economic Co-operation and Development<br>PBT: Persistent, Bioaccumulative and Toxic<br>vPvB: Very Persistent and very Bioaccumulative<br>DNEL: Derived non-effect level<br>PNEC: Predicted non-effect concentration<br>LC50: Lethal concentration 50%<br>LD50: Lethal dose 50%<br>NOEL: Non-observed effect level<br>NOAEL: Non observed adverse effect level<br>NOAEC: Non observed adverse effect concentration<br>SVHC: Substances of Very High Concern |
| Key literature references and sources for data: | REACH Registraton dossier and database of registered substances on the European Chemicals Agency (ECHA). |
| Indication of which of the methods of evaluating information referred to in Article 9 of Regulation (EC) No 1272/2008 was used for the purpose of classification: | No information available. |
| Relevant R phrases, hazard statements, safety phrases and/or precautionary statements: | Risk Phrases<br>R20: Harmful by inhalation.<br>R22: Harmful if swallowed.<br>R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.<br><br>Safety Phrases<br>S 2: Keep out of the reach of children.<br>S13: Keep away from food, drink and animal feedingstuffs.<br>S25: Avoid contact with eyes.<br>S36: Wear suitable protective clothing.<br>S37: Wear suitable gloves.<br>S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).<br><br>**Hazard statement(s)**<br>H302: Harmful if swallowed. |

H332: Harmful if inhaled.
H410: Very toxic to aquatic life with long lasting effects.

| | |
|---|---|
| Advice on any training appropriate for workers: | No information available. |
| Other information: | This information is based on the knowledge we have so far. This SDS refers exclusively to this product. All chemical substances in this product have been reported or are exempt from notification under notification to the EC laws. |

Information in this SDS is based on the available published sources and is believed to be accurate. No warranty, express or implied, is made and our company assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application. The specifications of this safety data sheet describes the safety requirements of our product, this is not a guarantee of characteristics. They are based on current state.