

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: Do 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 QUÍMICAS DEL VALLÉS, S.A.**
Av. Rafael Casanova, 81
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

Availability: (34) 935.796.677
(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
Acute Tox. Oral Cat. 4	H302: Harmful if swallowed.	N/A
Acute Tox. Inhalation Cat. 4	H332: Harmful if inhaled.	
Aquatic Acute Tox. Cat.1	H400: Very toxic to aquatic life.	
Aquatic Chronic Tox. Cat.1	H410: Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Labelling according to Regulation (EC) 1272/2008

Pictograms and 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 and spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P391 Collect spillage.
P501 Dispose of contents/container to an authorised hazardous waste collection site in accordance with national regulation.

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

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:

SP1: Do not contaminate water with the product or its container (Do not clean

COPPER HYDROXIDE (40%Cu) WG

application equipment near surface water/Avoid contamination via drains from farmyards and roads).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Composition (%) : Copper Hydroxide (40 % exp. as Cu w/w)

Chemical name	Content (%)	EC number	CAS Number	Classification Regulation (EC) 1272/2008	Hazard statement(s)*
COPPER HYDROXIDE TECHNICAL	69.81 (for a technical a.i. having 57.3% Cu content)	243-815-9	20427-59-2	Acute Tox. oral. Cat 4 Acute Tox. Inhalation Cat 2 Eye damage Cat 1 Aquatic Tox. Acute Cat 1 Aquatic Tox. Chronic Cat 1	H302 H330 H318 H400 M=10 H410

(* See the full text of the hazard statements in section 16.

Composition (%): Copper Hydroxide (40 % exp. as Cu w/w)

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:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. 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. Do not forget to take off contact lenses. Get medical attention if irritation occurs.

En case of ingestion:

Check breathing.
If necessary artificial respiration.
Keep the patient at rest.
Maintain body temperature.
Never give anything by mouth to an unconscious person.
If swallowed, do not induce vomiting.
If the person is unconscious lay her on her side with the head lower than the rest of the body and semiflexed knees.
Request attention medical and show this tab or label.

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.
Headache and weakness may occur, proceeding to fainting or unconsciousness
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 determined

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Use dry chemical or CO2.
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



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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:

Do not breathe the powder.

Avoid contact with mouth, eyes and skin.

Keep unauthorised people, children and animals away from the spillage area.

Wear suitable protective clothing and gloves to prevent contamination.

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.

Do not clean the area contaminated with water.

Do not use brushes or compressed air to clean surfaces or clothing.

Other information:

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:

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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:

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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:

Not available

There are not data of PNEC

Control banding approach ("control banding"):

Good industrial hygiene practices

8.2. Exposure controls

Appropriate engineering controls:

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Appropriate exposure control measures related to

-

the identified use(s) of the substance or mixture:

Structural measures to prevent exposure:

Not available

Organisational measures to prevent exposure:

Not available



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Technical measures to prevent exposure:	Not available
<u>Individual protection measures, such as personal protective equipment</u>	
Eye/Face protection:	Avoid contact. 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 coverall 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. (Affinity FR FFP1 D - CE 0121 according to EN 149:2001) Do not breathe dust. 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.
<u>Environmental exposure controls</u>	
Appropriate exposure control measures related to the identified use(s) of the substance or mixture:	Not available
Structural measures to prevent exposure:	Not available
Organisational measures to prevent exposure:	Not available
Technical measures to prevent exposure:	Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Granulated product
Odour:	Odourless
Odour threshold:	No data available
pH-value at 1%:	8 - 10 (20 °C)
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	N/A
Flash point:	>61 °C
Evaporation Rate:	Not available
Flammability (solid, gas):	Non-flammable
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	0.65 - 0.85 g/cm ³ (20 °C)
Solubility (is):	Water solubility: Practically insoluble Fat solubility: Practically insoluble
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	>600 °C
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	Non-explosive
Oxidising properties:	Not available

9.2. Other information

Other information:	Not available
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity:	Not available
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10.2. Chemical stability

Chemical stability:	Stable under normal conditions of storage for a period of 2 years, as minimum.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions:	Not available
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10.4. Conditions to Avoid

Conditions to Avoid:	Moisture and temperatures above 40 ° C
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10.5. Incompatible materials

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Incompatible materials:

Acids and ammonium salts partially dissolve the product

10.6. Hazardous decomposition products

Hazardous decomposition products:

Copper hydroxide decomposes at temperatures over 140 °C, producing water and copper oxide.

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
Acute toxicity	Ingestion: LD50	300 < LD ₅₀ < 2000 mg/Kg b.w. Rat
	Inhalation: LC50	> 1.043 mg/l (4h) Rat
	Skin: LD50	> 2000 mg/kg b.w. (96h) Rat
Irritation:	Skin:	No oedema; no erythema.
	Eye:	No effects.
Corrosivity:		No information available.
Sensitisation:		Not sensitizer.
Repeated dose toxicity:		Not 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:

Not available.

Interactive effects:

Not available.

Other information:

Not available.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity (short-term)

Fishes:

LC₅₀ (*O. mykiss*) / 96 h = 0.0165 mg Cu/L (total)

Crustaceans:

Not available.

Algae:

Not available.

Other aquatic plants:

Not available.

Micro-organisms:

Not available.

Aquatic invertebrates:

Not available.

Macro-organisms:

Not available.

Environmental toxicity

Birds:

Not available.

Bees:

Not available.

Plants:

Not available.

Chronic (long-term) toxicity

Fish:

92 d NOEC (*O.mykiss*) = 0.0155 mg Cu / L (total)

Crustaceans:

Not available.

Algae:

Not available.

Other aquatic plants:

Not available.

Microorganisms:

Not available.

Macroorganisms:

Not available.

Environmental toxicity

Birds:

Not available.

Bees:

Not available.

Plants:

Not available.

12.2. Degradability

Abiotic Degradation:

Not available.

Physical- and photo-chemical elimination:

Not available.

Biodegradation:

Not available.

Other processes:

Copper is strongly absorbed by soils, and it does not degrade.

12.3. Bioaccumulative potential

Partition coefficient n-octanol /water (Kow):

Not available.

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Bioconcentration factor (BCF):

12.4. Mobility in soil

Known or predicted distribution to environmental compartments:

Surface tension:

Adsorption/Desorption:

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment:

12.6. Other adverse effects

Other adverse effects:

Environmental fate:

Photochemical ozone creation potential:

Ozone depletion potential:

Endocrine disrupting potential:

Global warming potential:

12.7. Other information

Other information:

12.8. Ecotoxicity

Ecotoxicity:

12.9. Toxicological effects

Toxicological effects:

Copper does not bioaccumulate. Organisms excrete copper naturally.

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.

Not available.

Not available.

This mixture does not contain any substance that has been assessed as PBT or vPvB

Not available.

Not available.

Not available.

Not available.

Not available.

Not available.

Not available.

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

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate 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 national provisions, either by incineration or recycling.

Appropriate 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:

Not available.

Appropriate methods of waste treatment of both substance or mixtures:

Not available.

Appropriate methods for the elimination of contaminated packaging:

Not available.

Special precautions:

Not available.

Community/national/regional provisions relating to waste management:

Not available.

Community/national/regional provisions relating to waste:

The elimination will be followed according to local, State or national provisions.

SECTION 14: Transport information

ADR/RID

UN Number:

UN3077

Proper Shipping Name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COPPER HYDROXIDE TECHNICAL)

Class:

9



ADR/RID Classification:

M7

Packing group:

III

Label:

9

Special Provisions:

274,335,601

Limited Quantities:

5 kg

Packing Instructions:

P002,IBC08,LP02,R001

Special Packing Provisions:

VV1

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Hazard identification number:	90
Kemler Code:	000
IMDG	
Marine Pollutant:	Yes
UN Number:	UN3077
Packing group:	-
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COPPER HYDROXIDE TECHNICAL)
Class:	-
Label:	-
EmS Guide:	F-A, S-F
IATA	
UN Number:	UN3077
Packing group:	-
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COPPER HYDROXIDE TECHNICAL)
Class:	-
Label:	-

SECTION 15: Regulatory information

EU regulations	Not available.
Phytosanitary Registration Number:	A plant protection registration number has not been declared.
Use authorizations:	Fungicide
Use restrictions:	For professional use only.
Other EU regulations:	Not available.
Information on emission of volatile organic compounds (VOC):	Not available.
National regulations:	Not available.
15.2. Chemical safety assessment	
Chemical safety assessment:	Not available.

SECTION 16: Other information

Reason for revision:	The SDS has been adapted according to regulation (EC) 2015/830 amending the Annex II of regulation 1907/2006 REACH. Updating of technical copper hydroxide harmonized classification in accordance to annex VI of CLP regulation.
Changes to the previous version:	Sections 3.2

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.

S20: When using do not eat or drink.

S21: When using do not smoke.

S22: Do not breathe dust.

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).



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Abbreviations and acronyms:

SDS: Safety Data Sheet
OEL: Occupational Exposure Limit
NACE: Nomenclature Générale des Activités Économiques dans les Communautés Européennes (French, EU classification system)
TRGS: Real Time Gross Settlement
OECD: Organisation for Economic Co-operation and Development
PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent and very Bioaccumulative
DNEL: Derived non-effect level
PNEC: Predicted non-effect concentration
LC50: Lethal concentration 50%
LD50: Lethal dose 50%
NOEL: Non-observed effect level
NOAEL: Non observed adverse effect level
NOAEC: Non observed adverse effect concentration
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 Hazard statements mentioned in Section 3

Hazard statement(s)

H302: Harmful if swallowed
H330: Fatal if inhaled
H318: Causes serious damage to eyes
H400: Very toxic to aquatic life.
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.