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

1.1. Product identifier

Trade Name: COPPER OXYCHLORIDE 30% + MANCOZEB 20% WP

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
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: (00 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

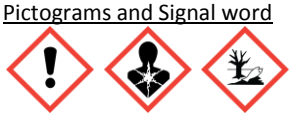
Classification according to Regulation (EC) 1272/2008

Hazard Classes/ categories		Hazard statement(s)	M-Factors
Acute Tox. Oral	Cat.4	H302: Harmful if swallowed.	No information available.
Acute Tox. Inhalation	Cat.4	H332: Harmful if inhaled.	
Repr. Tox.	Cat.2	H361: Suspected of damaging the unborn child.	
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.	
Skins sens.	Cat.1	H317: May cause an allergic skin reaction.	

2.2. Label elements

Labelling according to Regulation (EC) 1272/2008

Pictograms and Signal word



WARNING

Hazard statement(s)

H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H332: Harmful if inhaled.
H361d: Suspected of damaging fertility or the unborn child .
H410: Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust and spray.
P270 Do not eat, drink or smoke when using this product.
P280: Wear nitrile gloves and coverall.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash before reuse.
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.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	Content (%)	EC number	CAS Number	Classification Regulation (EC) 1272/2008	Hazard statement(s)*
COPPER OXYCHLORIDE TECHNICAL	53.6% (for a technical product having 56% Cu content)	603-724-0	1332-40-7	Acute Oral Tox. 4 Acute inhalation Tox. 4 Aquatic Acute 1 Aquatic Chronic 2	H302 H332 H400 H411
MANCOZEB TECHNICAL	20	-	8018-01-7	Skin Sens. 1 Repr. 2 Aquatic Acute 1	H317 H361 H400

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

Composition (%) : Copper Oxychloride (30% exp. as Cu w/w)
Mancozeb (20% exp. as Mancoezb pure 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 determinated

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

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 breath 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.
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. 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.

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: Blue powder
Odour: odourless
Odour threshold: No data available
pH-value at 1%: 6 - 8 (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:	0.75 - 0.95 g/cm³ (20 °C)	
Solubility (is):	Water solubility:	Copper oxychloride technical: insoluble. Mancozeb technical: 6,2 ppm (pH 7,5, 25ºC).
	Fat solubility:	Copper oxychloride techncial: insoluble in common solvents. Mancozeb technical: insoluble in common solvents.
Partition coefficient: n-octanol/water:	No data available	
Auto-ignition temperature:	>600 °C	
Decomposition temperature:	No data available	
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 under normal conditions of storage for a period of 2 years, as minimum.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: No data available.

10.4. Conditions to Avoid

Conditions to Avoid: Moisture and temperatures above 40 ° C

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.
Mancozeb degrades slowly with moisture and heat.

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 ·Rat
	Inhalation: LC50	1 mg/l ·Rat/4h
	Skin: LD50	>2000 mg/Kg ·Rat
Irritation:		Skin: No oedema. No erytema (rabbit) Eye: Non irritant (rabbit)
Corrosivity:		No information available.
Sensitisation:		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:		[a.s. Mancozeb] > 3% Repr. Toxicant Cat. 2

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:	LC_{50} (*D.rerio*) / 96h = 0.690 mg Cu/L
Crustaceans:	No information available.
Algaes:	No information available.
Other aquatic plants:	No information available.
Micro-organisms:	No information available.
Acquatic invertebrates:	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:	EyC_{50} (*P.subcapitata*) /72h = 0.008 mg Cu/L
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 oxychloride technical: Copper is strongly absorbed by soils, and it does not degrade. - Mancozeb Technical: Mancozeb is rapidly hydrolyzed. Undergoes hydrolytic degradation, oxidative, photolytic and microbial. DT50: 6-15 days.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

Known or predicted distribution to environmental compartments:	-Copper oxychloride technical: 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. - Mancozeb technical: not volatile. It is very mobile in soils.
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:	UN3077
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains COPPER OXYCHLORIDE TECHNICAL, MANCOZEB 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
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 OXYCHLORIDE TECHNICAL, MANCOZEB 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 OXYCHLORIDE TECHNICAL, MANCOZEB 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

Reason for revision:	Safety data sheet amended according to regulation 2015/830 amending the annex II of regulation 1907/2006 REACH. Amending of the EC number linked to the CAS number 1332-40-7.
Changes to the previous version:	Section 3.2
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.

Hazard statements mentioned in section 3:

Hazard statement(s)

H302: Harmful if swallowed.
H317: May cause an allergic skin reaction.
H332: Harmful if inhaled.
H361: Suspected of damaging fertility or the unborn child
H400: Very toxic to aquatic life.
H411: 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.