



Safety Data Sheet dated 05/02/2015, version 1

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

1.1 Product Identifier

Mixture identification: COCOH 14 WG (COC 14% + COH 14% WG)

Trade name: AIRONE WG

Trade code: -

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

Agricultural use

Other use not admitted

1.3 Details of the supplier of the safety data sheet

Company:

ISAGRO S.p.A. – Via Caldera, 21 – 20153 – Milan - Italy

Emergency telephone number of the company and/or of an authorised advisory centre:

Tel.: 02 40 901 276

Competent person responsible for the safety data sheet:

msds@isagro.it


1.4 Emergency telephone number


QSE Department (office hours: 9.00 – 18.00) - Phone n.. ++39 02 40901209

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Labelling according to Regulation (CE) n. 1272/2008:

Symbols:



Warning

Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P273 Avoid release to the environment.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

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

2.3. Other hazards

vPvB and/or PBT content: none

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances





Not applicable

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:






20% - 25% Copper Oxychloride Tech. (57-58)

CAS: 1332-40-7

-  3.1/4/Oral Acute Tox. 4 H302
-  3.1/4/Inhal Acute Tox. 4 H332
-  4.1/A1 Aquatic Acute 1 H400
-  4.1/C2 Aquatic Chronic 2 H411

20% - 25% Copper Hydroxide Tech.

CAS: 20427-59-2

-  3.1/2/Inhal Acute Tox. 2 H330
-  3.1/4/Oral Acute Tox. 4 H302
-  3.3/1 Eye Dam. 1 H318
-  4.1/A1 Aquatic Acute 1 H400
-  4.1/C2 Aquatic Chronic 2 H411

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: denaturation of proteins with lesion at the level of the mucous membranes, renal and hepatic damage, CNS damage, emolysis. Vomit with emission of green material, gastro-oesophageal pyrosis, haematic diarrhea, abdominal colitis, haemolytic jaundice, hepatic and renal insufficiency, convulsions, collapse.
Fever caused by metal inhalation. Skin and eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment-

Therapy:

gastric lavage with a-lactalbumin solution, in case of high cupraemia use ligand compounds, penicillamine if the oral route is viable or intravenous CaEDTA and intramuscular BAL; for the rest symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases which, at high temperatures, may contain toxic substances such as CO_x and HCl.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

- See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
Copper Oxychloride Tech./Copper Hydroxide Tech.:
TLV TWA - 1 mg/m³ (as Cu)
- 8.2. Exposure controls
Eye protection:
Not needed for normal use. Anyway, operate according good working practices.
- Protection for skin:
No special precaution must be adopted for normal use.
- Protection for hands:
Not needed for normal use.
- Respiratory protection:
Not needed for normal use.
- Thermal Hazards:
None
- Environmental exposure controls:
None

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- | | |
|---|---|
| Appearance and colour: | Granules, from light blue to green |
| Odour: | Odourless |
| Odour threshold: | Not relevant |
| pH: | 7.67 (suspension 1% in water) |
| Melting point / freezing point: | Not applicable |
| Initial boiling point and boiling range: | Not applicable |
| Solid/gas flammability: | Not flammable (based on ingredients) |
| Upper/lower flammability or explosive limits: | Not relevant |
| Vapour density: | Not applicable |
| Flash point: | Not relevant |
| Evaporation rate: | Not applicable |
| Vapour pressure: | Not applicable |
| Relative density: | 1.11 g/ml |
| Solubility in water: | Insoluble |
| Lipid solubility: | Insoluble |
| Partition coefficient (n-octanol/water): | Not applicable due to salt insolubility |
| Auto-ignition temperature: | Not relevant |
| Decomposition temperature: | Not known |
| Viscosity: | Not applicable |
| Explosive properties: | Not explosive |
| Oxidizing properties: | Not oxidizing (based on ingredients) |
- 9.2 Other information
- | | |
|--------------|---------------|
| Miscibility: | Not available |
|--------------|---------------|

Fat Solubility:	Not available
Conductivity:	Not available
Substance Groups relevant properties	Not available

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Data referred to the *mixture*:

Acute toxicity:

LD50 (oral) (OECD 423; OPPTS 870,1000):
> 5000 mg/kg (rat)

LD50 (dermal) (OECD 402; OPPTS 870.1200):
> 2000 mg/kg (rat)

LC50 (4h) (inhalation):
Not required

Irritation power:

Acute skin irritation (OECD 404):
Not irritating (Male New Zealand White rabbit)

Acute eye irritation (OECD 405):
Not irritant (Male New Zealand White rabbit)

Skin sensitisation (OECD 406):
Not sensitizer (Guinea Pig)

Data referred to *copper oxychloride*:

Carcinogenic effect (OECD 451):
No carcinogenic potential (test, rat)
No evidence of carcinogenic effects (ingestion) (man)

Mutagenic effect (OECD 474):
No evidence of mutagenic effect

Teratogenicity (EPA-TSCA 793400):
No evidence of teratogenic effect (test, rat)

Reproduction toxicity (OECD 416):
No evidence of reproduction toxicity

STOT-single exposure:
Not applicable

STOT-repeated exposure:
Not applicable

Aspiration hazard:
Not applicable

Data referred to *copper hydroxide*:

Carcinogenic effect (OECD 451):
No carcinogenic potential (test, rat)
No evidence of carcinogenic effects (ingestion) (man)

Mutagenic effect (OECD 474):
No evidence of mutagenic effect

Teratogenicity (EPA-TSCA 793400):
No evidence of teratogenic effect (test, rat)

Reproduction toxicity (OECD 416):
No evidence of reproduction toxicity

STOT-single exposure:
Not applicable

STOT-repeated exposure:
Not applicable

Aspiration hazard:
Not applicable

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Data referred to the *mixture*:

Fish –
Acute/chronic toxicity (OECD 203):
Onchorynchus mykiss,
LC50 (96 h) = 2.29 mg Cu/L
NOEC (96 h) = < 0.9 mg Cu/L

Invertebrates –
Acute/chronic toxicity (OECD 202):
Daphnia magna,
EC50 (48 h): 126.88 µg/L
NOEC (48 h): 110.27 µg/L

Algae-
Acute/chronic toxicity (OECD 201):
Desmodesmus subspicatus,

ErC50 (72h): 84 µg Cu/L
EyC50 (72h): 43.7 µg Cu/L

Bee -

Acute toxicity (OECD 213/214 (1998):
Oral LD50 (72 h) = 15.712 µg a.i./bee
Contact LD50 (48 h) > 200 µg a.i./bee

12.2 Persistence and degradability

Data referred to *copper oxychloride tech. / copper hydroxide tech.*:
Stable to hydrolysis and not expected to be degraded by photolysis in water.
Not readily biodegradable.
BOD: not applicable
COD: not available

12.3 Bioaccumulative potential

Data referred to *copper oxychloride tech. / copper hydroxide tech.*:
Not applicable due to salt insolubility

12.4 Mobility in soil

Data referred to *copper oxychloride tech. / copper hydroxide tech.*:
Not available. Copper is considered weakly mobile in soil

12.5 Results of PBT and vPvB assessment

Not requested. No PBT and/or vPvB substance is contained in the preparation

12.6 Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

14.1 UN number:

ADR-UN number: 3077
IMDG-Un number: 3077

14.2 UN proper shipping name:

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (copper oxychloride and copper hydroxide)
IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (copper oxychloride and copper hydroxide)

14.3 Transport hazard class(es):

ADR-Class: 9
ADR-Label: 9
ADR - Hazard identification number: 90
IMDG-Class: 9

14.4 Packing Group:

ADR-Packing Group: III
IMDG-Packing group: III

14.5 Environmental hazards

Marine pollutant: Marine pollutant

14.6 Special Precautions for User

Limited Quantity: 5 kg
IMDG-EMS: F-A, S-F
Tunnel Restriction Code: (E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC
(Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to
chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE.
Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n.
790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent
amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

15.2. Chemical safety assessment
Not requested

SECTION 16: Other information

H statements in section3:

H302 Harmful if swallowed.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H330 Fatal if inhaled.
H318 Causes serious eye damage.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold
CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date.
It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to
the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.
CAS: Chemical Abstracts Service (division of the American Chemical
Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of
Chemicals.

IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.