
VALAGRO SDS according to HCS APPENDIX D TO §1910.1200

Date: 1 December 2015 Rev. 1.0

Product: 11648

Code: Axilo Cu

Print Date: 1 December 2015

SAFETY DATA SHEET

Axilo Cu

SECTION 1: IDENTIFICATION

1.1. Product Identifier used on the label

Trade name: Axilo Cu

Chemical name: Cuprate(2-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium (1:2), (OC-6-21)-

CAS number: 14025-15-1

EC number: 237-864-5

Formula: C₁₀H₁₂CuN₂O₈.2Na

1.2. Other means of identification

Trade code: 11648

1.3. Recommended use of the chemical and restrictions on use:

Fertilizer

1.4. Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Produced and packed by:

VALAGRO Spa

Via Cagliari, 1 Zona Industriale

66041 Atessa (CH) ITALY

Tel. (+39) 08728811 Fax (+39) 0872881382

www.valagro.com

Distributed and guaranteed by:

Valagro USA Inc.

19500 Hwy 249, suite 245 - Houston TX 77070

Tel (281) 664 8700 - Fax (281) 664 8701

Competent person responsible for the safety data sheet:

regulatory@valagro.com


1.4. Emergency phone number


Valagro USA Inc

Tel (281) 664 8700 - Fax (281) 664 8701

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the chemical in accordance with paragraph (d) of §1910.1200;

 Warning, Acute Tox. 4, Harmful if swallowed.

 Warning, Eye Irrit. 2A, Causes serious eye irritation.

2.2. Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200:

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**Warning**

Harmful if swallowed
Causes serious eye irritation

Wash hands thoroughly after handling
Do not eat, drink or smoke when using this product.
If swallowed: Call a doctor if you feel unwell.
Rinse mouth.
Wear safety goggles and face shield.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations

First Aid:

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
Inhalation : Remove to fresh air. Get medical attention for any breathing difficulty.
Eye Contact : Rinse cautiously with water for several minutes holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and if symptoms persist, call a physician.
Ingestion : Rinse mouth with water. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person. Immediately call a doctor
Skin Contact: Remove all contaminated clothing. Rinse with plenty of soap and water.

2.3. Hazards not otherwise classified that have been identified during the classification process:
None

2.4. Ingredient(s) with unknown acute toxicity:
None component with unknown acute toxicity is present in the mixture

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

3.1 Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

Nome	N° EINECS	CAS NUMBER	%
Cuprate(2-), [[N,N'-1,2-ethanediy]bis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium (1:2), (OC-6-21)-	237-864-5	14025-15-1	90-97
Water	231-791-2	7732-18-5	10-3

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SECTION 4: FIRST AID MEASURES

4.1. Description of necessary measures:

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Never give anything by mouth to an unconscious person; if person is conscious rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. 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/effects, acute and delayed:

Possible symptoms that may occur:

Inhalation: may cause irritation to the respiratory tract

Symptoms: cough, shortness of breath

Ingestion:

The product dissolved in water or in presence of moisture, cause an acid reaction and if swallowed can cause irritation and burns of the mouth, throat and digestive tract.

Symptoms: vomiting, abdominal pain, gastrointestinal disorders

Contact with skin:

May cause skin irritation

Symptoms: redness, itching, pain.

Contact with eyes:

Causes serious eye irritation

Symptoms include pain and redness

4.3. Indication of 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:

None

SECTION 5. FIRE-FIGHTING MEASURES

5.1. Suitable (and unsuitable) extinguishing media.

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

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Burning produces heavy smoke containing carbon oxides, nitrogen oxides

5.3. Special protective equipment and precautions for fire-fighters.

Wear suitable personal protective equipment and self-contained 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.

Protective clothing for firefighters (full protective suit, helmet, gloves, boots) must conform to the standard EN469

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothes giving a total skin protection, nitrile rubber and safety glasses.

See protective measures under point 7 and 8.

Ensure adequate ventilation, move people in a safe place.

Avoid dust generation

Avoid any accumulation of electrostatic charge which may create a hazardous condition and cause an ignition.

6.2. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

Avoid raising dust

Wash with plenty of water and adsorb with organic material or sand collect the product absorbed for example using shovel and broom

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

Dilute with water and retain contaminated wash water and dispose in authorized facilities or pick up in clean plastic labeled containers and reuse as fertilizer.

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

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 in original containers tightly closed in a well-ventilated place far from humidity and heat source

Keep away from food, drink and feed.

Incompatible materials:

Strong oxidants.

Instructions as regards storage premises:

Adequately ventilated premises.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure limit values:

Exposure limit Copper (Cu)

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OSHA PEL 8 hour TWA:

0.1 mg/m³ fumes

1 mg/m³ dust or mist

NIOSH REL:

0.1 mg/m³ fumes

1 mg/m³ dust or mist

ACGIH 2015 TLV:

0.2 mg/m³ fumes

1 mg/m³ dust or mist

8.2 Appropriate engineering controls.

It is recommended that the workers wear appropriate gloves, protective glasses and use a anti-powder mask

8.3. Individual protection measures, such as personal protective equipment:

Please observe the usual precautionary measures for handling of chemicals.

The personal protective equipment must be compliant to the regulation UNI –EN in force

Eye protection:

Use close fitting safety goggles according to the standard EN 166, don't use eye lens

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton

Protection for hands:

Use protective nitrile rubber gloves that provides comprehensive protection, according to EN 374

Respiratory protection:

In case of dust generation use anti-powder mask with P2 (FFP2) filters according to the EN 149:2001

The powder exposition limit must be respected.

Thermal Hazards:

None Known

Environmental exposure controls:

None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour: blue microgranules

Odour: odorless

Odour threshold: not applicable

pH 1% at 20°C: 4,5

Melting point / freezing point: Decomposes before melting

Initial boiling point and boiling range: not applicable

Solid/gas flammability: not applicable

Upper/lower flammability or explosive limits: not applicable

Vapour density: not applicable

Flash point: not applicable

Evaporation rate: not applicable

Vapour pressure: not applicable

Density: 0,8-0,9 Kg/dm³

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Solubility in water:	1200 g/l at 20 °C
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	not applicable, solid
9.2. Other information	
Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions of storage and use

10.2. Chemical stability

Stable under normal conditions of storage and use

10.3. Possibility of hazardous reactions

It reacts with strong oxidizing agents.

Contact with hot surfaces may ignite the product

10.4. Conditions to avoid

Avoid heating the product at high temperatures

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

In case of fire and high temperatures can develop carbon oxides, nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);

Inhalation:

may cause irritation to the respiratory tract; high concentrations of dust in the air may cause irritation of respiratory tract.

Ingestion:

The product dissolved in water or in presence of moisture, cause an acid reaction and if swallowed can cause irritation and burns of the mouth, throat and digestive tract.

Contact with skin:

May cause skin irritation

Contact with eyes:

causes serious eye irritation

11.2 Symptoms related to the physical, chemical and toxicological characteristics:

Inhalation:

Symptoms: cough, shortness of breath

Ingestion:

Symptoms: vomiting, abdominal pain, gastrointestinal disorders.

Contact with skin:

Symptoms: redness, itching, pain.

Contact with eyes:

Symptoms include pain and redness

11.3 Delayed and immediate effects and also chronic effects from short- and long-term exposure;

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See section 11.2

11.4 Numerical measures of toxicity (such as acute toxicity estimates).

Copper EDTA - CAS: 14025-15-1

- a) acute toxicity:
 - LD50 (Oral) = 890 mg/kg (test similar to OECD 403)
 - LD50 (dermal, rat) > 2000 mg / kg bw (OECD 402 read-across from Ethylenediaminetetraacetic acid ferric sodium salt)
 - 4h-LC50 (inhalation) > 5.32 g/m³ (OECD 436)
- b) skin corrosion/irritation:
 - slightly irritating (test on rabbit: 50% aqueous solution, OECD 404)
- c) serious eye damage/irritation:
 - irritating (Test on rabbit, OECD 405)
- d) respiratory or skin sensitisation:
 - not sensitizing (test on rat, OECD 429 Local Lymph Node Assay)
- e) germ cell mutagenicity:
 - not classified
- f) carcinogenicity:
 - non-carcinogenic (read-across from hydrogen 2,2', 2'', 2''' - (ethane-1,2-diylidinitrilo) tetraacetate)
- g) reproductive toxicity:
 - NOEL reproduction and development ≥ 500 mg/kg bw/day.
- h) STOT-single exposure:
 - not classified
- i) STOT-repeated exposure:
 - not classified
- j) aspiration hazard: unlikely event (solid)

11.5 Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

None

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

The release of large amounts may cause a decreasing of the pH value and can have negative effects on aquatic environments.

Copper EDTA - CAS: 14025-15-1

- a) Aquatic acute toxicity:
 - Species: Fish = 555 mg/l - Notes: OECD 203
 - Species: Daphnia = 109.2 mg/l - Notes: OECD 202
 - Species: Algae = 662.6 mg/l - Notes: OECD 201
- b) Aquatic chronic toxicity:
 - Species: Fish = 37.2 mg/l - Notes: OECD 210
 - Species: Daphnia = 29.5 mg/l - Notes: OECD 211
 - Species: Algae = 43.7 mg/l - Notes: OECD 201
- c) Bacteria toxicity:
 - Endpoint: NOEC = 654 mg/l - Duration h: 3 - Notes: OECD 209

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12.2. Persistence and degradability:

Abiotic degradation: half-life 20 days

Resistant to hydrolysis (read across Ethylenediaminetetraacetic acid ferric sodium salt)

Biotic degradation:

The EDTA and its salts are not readily degradable; slightly alkaline pH improves the biodegradability of EDTA

12.3. Bioaccumulative potential

The substance has a low bioaccumulation potential (log Kow <3)

12.4. Mobility in soil

N.A.

12.5. Other adverse effects (such as hazardous to the ozone layer).

None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

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

- Packaging: Dispose according to regulations.

SECTION 14: TRANSPORT INFORMATION

UN number

Not classified as dangerous in the meaning of transport regulations.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group

N.A.

Environmental hazards

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

Most important toxic component: N.A.

Transport in bulk (according to Annex II of MARPOL and the IBC Code)

N.A.

Special precautions

N.A.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations specific for the product in question.

Hazard Communication Standard (HCS) Haz Com 2012

OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009.

Hazard Communication Standard

United Nations Recommendations on the Transport of Dangerous Goods.

OSHA Permissible Exposure Limit

[29 CFR 1926.55 Appendix A](#)

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value

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(TLV)

National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limit

(REL)

Chemical Abstracts Service (CAS) Registry Number

USA - Federal regulations

TSCA - Toxic Substances Control Act

List of substances included in the TSCA inventory: Cuprate(2-), [[N,N'-1,2-ethanediybis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium (1:2), (OC-6-21)-

SARA - Superfund Amendments and Reauthorization Act

Section 302 – Extremely Hazardous Substances: no substances listed.

Section 304 – Hazardous substances: no substances listed.

Section 313 – Toxic chemical list: no substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

None

CAA - Clean Air Act

CAA listed substances:

None.

CWA - Clean Water Act

CWA listed substances:

Iron sulphate

SECTION 16: OTHER INFORMATION , INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of preparation of the SDS: revision 1.0, date December 1, 2015

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

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 SDS cancels and replaces any preceding release.

N.A. no data available

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"

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	(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.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
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.