

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 03/20/2018

Reviewed on 03/20/2018

1 Identification

- **Product Identifier**
- **Trade Name:** Copper Chelate 14%
- **Relevant identified uses of the substance or mixture and uses advised against:** Fertilizer
- **Product Description:** Plant nutrient, Chelating agent
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Grow More
15600 New Century Drive
Gardena, CA 90248
(310) 515-1700
www.growmore.com
- **Emergency telephone number:** (310) 515-1700

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS07

Acute toxicity 4 H302 Harmful if swallowed.

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements:**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07

- **Signal word:** Warning
- **Hazard statements:**
H315+H320 Causes skin and eye irritation.
H335 May cause respiratory irritation.
- **Precautionary statements:**
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a poison center/doctor if you feel unwell.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P362+P364 Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

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- P332+P313 If skin irritation occurs: Get medical advice/attention.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Unknown acute toxicity:**

This value refers to knowledge of known, established toxicological or ecotoxicological values.
 24.5 % of the mixture consists of component(s) of unknown toxicity.

- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Physical Hazard = 0

- **Hazard(s) not otherwise classified (HNOC):** None known

* 3 Composition/Information on Ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.
- **Dangerous Components:**

Ethylenediaminetetraacetic acid, copper disodium complex	Acute Tox. 4; H302 Skin Irrit. 2A, H319	90-100%
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- **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

4 First-Aid Measures

- **Description of first aid measures:**
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.

(Contd. on page 3)

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- If eye irritation occurs, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No further relevant information.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

*** 6 Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Sweep up the material.
Dispose contaminated material as waste according to section 13.
- **Reference to other sections:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

(Contd. on page 4)

Safety Data Sheet (SDS)

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Reviewed on 03/20/2018

Trade Name: Copper Chelate 14%**7 Handling and Storage**

- **Handling**
- **Precautions for safe handling:**
Avoid contact with skin, eyes and clothing. Open and handle receptacle with care. Avoid formation of respirable particles. Smoking, eating and drinking should be prohibited in the application area.
- **Information about protection against explosions and fires:** Keep protective respiratory device available.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry place in tightly closed receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection**Hazardous ingredients**

Chemical Name	CAS-No.	Classification	Concentration [%]
Ethylenediaminetetraacetic acid, copper-disodium complex	14025-15-1	Acute Tox. 4; H302 Eye Irrit. 2A; H319	90 - 100

For the full text of the H-Statements mentioned in this Section, see Section 16.

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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Trade Name: Copper Chelate 14%**· Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· Eye protection:

Tightly sealed goggles

9 Physical and Chemical Properties**· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Crystalline

Color:

Blue

· Odour:

Not determined

· Odor threshold:

Not determined.

· pH-value:

6 - 7 at 1% solution

· Change in condition**Melting point/Melting range:**

Decomposes before melting

Boiling point/Boiling range:

Not applicable.

· Flash point:

None

· Flammability (solid, gaseous):

Not determined.

· Ignition temperature: $\geq 200\text{ }^{\circ}\text{C}$ **· Decomposition temperature:**263 $^{\circ}\text{C}$ **· Auto igniting:**

No data available.

· Danger of explosion:

Product does not present an explosion hazard.

· Explosion limits:**Lower:** $\geq 40\text{ g/m}^3$ **Upper:**

No data available.

· Vapor pressure:

Not applicable.

· Density:**Relative density:**

Not determined.

Vapor density:

Not applicable.

Evaporation rate:

Not applicable.

· Solubility in / Miscibility with:**Water:**680 g/l at 0 $^{\circ}\text{C}$ **· Partition coefficient (n-octanol/water):** Not determined.**· Viscosity:****Dynamic:**

Not applicable.

Kinematic:

Not applicable.

· Solvent content:**VOC content:**

0.00 %

(Contd. on page 6)

Safety Data Sheet (SDS)

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· **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** 263 °C
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** None known.
- **Incompatible materials:** None known.
- **Hazardous decomposition products:** Carbon oxides, nitrogen oxides (NO_x)

*** 11 Toxicological Information****Toxicology Assessment**

Further information : No further data available.

Test result

Acute oral toxicity : Acute toxicity estimate: 956.99 mg/kg
Method: Calculation method

Carcinogenicity:

IARC : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

TOXICOLOGY DATA FOR THE INGREDIENTS:**Test result****Component: Ethylenediaminetetraacetic acid, copper-disodium complex**

Acute oral toxicity : LD50 Oral: 890 mg/kg
Species: Rat
Method: OECD Test Guideline 423

Skin irritation : Result: No skin irritation
Method: OECD Test Guideline 404

Eye irritation : Result: Irritating to eyes.
Classification: Irritating to eyes.
Method: OECD Test Guideline 405

· **Toxicity:**· **Aquatic toxicity:**

Sensitization : Result: Not sensitizing.
Method: OECD Test Guideline 429

EC50 226 mg/l (Water flea)

Germ cell mutagenicity

Genotoxicity in vitro : Ames test

Result: negative

Method: OECD Test Guideline 471

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- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

- **UN-Number:**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **UN proper shipping name:**
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **DOT, ADR/ADN, ADN, IMDG, IATA**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

*** 15 Regulatory Information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

7757-79-1 Potassium Nitrate

TSCA (Toxic Substances Control Act):

7722-76-1 Ammonium phosphate monobasic

7778-80-5 Potassium Sulfate

(Contd. on page 8)

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7757-79-1	Potassium Nitrate
15708-41-5	EDTA feric sodium complex
15375-84-5	Mn EDTA, Diammonium Salt
14025-15-1	Copper EDTA
10043-35-3	Boric Acid

· **California Proposition 65:**· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **New Jersey Right-to-Know List:**

7757-79-1 Potassium Nitrate

· **New Jersey Special Hazardous Substance List:**

None of the ingredients are listed.

· **Pennsylvania Right-to-Know List:**

7757-79-1 Potassium Nitrate

· **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

· **Carcinogenic categories:**· **EPA (Environmental Protection Agency):**

10043-35-3 Boric Acid I (oral)

· **TLV (Threshold Limit Value established by ACGIH):**

10043-35-3 Boric Acid A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms:**

GHS07

· **Signal word:** Warning· **Hazard-determining components of labeling:**

Ammonium phosphate monobasic

· **Hazard statements:**

H315+H320 Causes skin and eye irritation.

H335 May cause respiratory irritation.

(Contd. on page 9)

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- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves.
P302+P352 If on skin: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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P312 Call a poison center/doctor if you feel unwell.
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P362+P364 Take off contaminated clothing and wash it before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:

None of the ingredients are listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other Information**

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Date of preparation / last revision: 03/20/2018 / 4**Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety & Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Ox. Sol. 3: Oxidizing solids – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
Repr. 1B: Reproductive toxicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

*** Data compared to the previous version altered.**SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106