

## SAFETY DATA SHEET

### Section 1 - Identification of the substance/mixture and of the supplier

**Trade Name:** Krystal Klear® Cu

**Product Code:** KKCu

**Chemical Name:** EDTA & IDS chelated copper solution

**Application/Uses:** Fertilizing Compound

**Restrictions:** None

**Distributor Information:** PERFORMANCE NUTRITION - A Division of LidoChem, Inc. 20 Village Court, Hazlet, NJ 07730  
Phone: (732) 888 8000 • Fax: (732) 264 2751 • email: info@lidochem.com

**Emergency Phone Number:** CHEMTREC - Day or Night - at 800 424 9300

### Section 2 - Hazard Identification

#### Classification of the substance or mixture (GHS-US)

Acute oral toxicity 4  
Skin corrosion/irritation 2  
Serious eye damage/irritation 2A  
STOT SE 3 (irritating to respiratory system)

#### Physical Hazards

None

#### Hazard Statements

H302: Harmful if swallowed  
  
H315: Causes skin irritation  
  
H319: Causes serious eye irritation  
  
H335: May cause respiratory irritation  
  
H336: May cause drowsiness or dizziness

#### GHS Label elements

##### Hazard Pictograms



##### Signal Word

**Warning**

#### HNOC - Hazards Not Otherwise Classified

None

#### Precautionary Statements:

##### Precautionary Statements - Prevention, Response, Storage, Disposal

P261: Avoid breathing fume/mist/vapours/spray.

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.  
P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P312 + P330: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P332 + P313: If skin irritation occurs: Get medical advice/attention.

P304 + P340 + P312: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/container to an approved waste disposal plant in accordance with local/regional/national regulations.

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**Section 3 - Composition/Information on Ingredients**

**Chemical Identity:** 5% Cu

CAS#:	Common Name/Synonyms:	% by Wt.
12069-69-1	Copper (II) carbonate basic	9-11%
60-00-4	Ethylenediaminetetraacetic acid	5-6%

**Section 4 - First Aid Measures**

**Description of first aid measures**

**General Advice:**

Remove contaminated clothing and shoes. Seek medical advice immediately and show safety data sheet or label to the doctor, if possible.

**If Inhaled:**

Remove person from contaminated area to fresh air. If not breathing, give artificial respiration. Seek medical attention if irritation or dizziness occurs.

**In Case Of Skin Contact:**

Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

**In Case Of Eye Contact:**

Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention immediately.

**If Swallowed:**

Seek medical attention or call a poison control center immediately. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:**

The most important known symptoms and effects are described in section 2. Further symptoms are possible.

**Indication of any immediate medical attention and special treatment needed:**

No additional information available.

**Section 5 - Fire-fighting Measures**

**Extinguishing media:**

Suitable extinguishing media: water, dry powder, carbon dioxide, foam.

**Specific Hazards arising from the substance or mixture:**

Thermal decomposition generates corrosive vapors. Copper oxides.

**Advice for firefighters:**

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.

**Further information:**

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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**Section 6 - Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:**

As outlined in section 8, wear appropriate respiratory protection. Avoid breathing fume, vapours, spray, mist or gas. Use personal protective clothing. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**

Do not allow spilled product to enter water supplies.

**Methods and materials for containment and cleaning up:**

Spills should be contained by diking area with sand or soil. Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back into the original container.

**Section 7- Handling and Storage**

**Precautions for safe handling:**

Do not eat, drink or smoke when using this product. Wash hands and other exposed areas thoroughly after handling. Store in a plastic or stainless steel container, well ventilated, dry place.

**Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed in a dry and well ventilated area.

**Section 8 - Exposure Control / Personal Protection**

**Control parameters:**

Chemical Identity:	CAS #:	ACGIH Threshold Limit Values		OSHA PEL		NIOSH REL	
		TWA	STEL	TWA	STEL	TWA	STEL
Copper (II) carbonate basic	12069-69-1	1 mg/m <sup>3</sup>	NDA	NDA	NDA	NDA	NDA
Ethylenediaminetetraacetic acid	60-00-4	NDA	NDA	NDA	NDA	NDA	NDA

**Appropriate engineering controls:**

Provide sufficient ventilation to maintain airborne concentrations below the recommended exposure limits. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

**Individual protection measures, such as personal protective equipment:**

**Eye protection:**

Tightly fitting safety goggles or face shield if a splashing hazard exists. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH.

**Skin protection:**

Handle with chemical resistant protective gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.

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**Section 8 - Exposure Control / Personal Protection (cont.)**

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, i.e. apron, chemical resistant footwear plus socks, long sleeved shirt, long pants, chemical protection suit.

**Respiratory protection:**

Respiratory protection is not typically required if airborne concentrations are maintained below the established exposure limits. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. Observe OSHA regulations for respirator use (29 CFR 1910.134)

**General safety and hygiene measures:**

Eye wash fountains and safety showers must be easily accessible. Employees should wash their hands and face before eating, drinking or using tobacco products.

**Section 9 - Physical and Chemical Properties**

<b>Appearance (physical state, color, etc):</b>	Clear, dark blue liquid
<b>Odor:</b>	None
<b>Odor threshold:</b>	None
<b>pH:</b>	8.0 +/- 0.3
<b>Melting point:</b>	No data available
<b>Freezing point:</b>	No data available
<b>Initial boiling point:</b>	No data available
<b>Boiling range:</b>	No data available
<b>Flash point:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Upper/lower flammability or explosive limits:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Vapor density:</b>	No data available
<b>Relative density:</b>	No data available
<b>Solubility:</b>	Soluble
<b>Partition coefficient: n-octanol/water:</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Specific gravity:</b>	1.38

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**Section 10 - Stability and Reactivity**

**Reactivity:**

No data available.

**Chemical stability:**

Product is stable at ambient temperature and pressure, under normal storage and handling conditions.

**Possibility of hazardous reactions:**

None expected to occur.

**Conditions to avoid (i.e. static discharge, shock or vibration):**

No data available.

**Incompatible materials:**

Strong acids

**Hazardous decomposition products:**

No data available.

**Section 11- Toxicological Information**

**Likely routes of exposure:**

Inhalation, ingestion, skin and eye contact.

**Symptoms related to physical, chemical and toxicological characteristics and delayed and immediate effects and chronic effects from short and long term exposure:**

**Acute Toxicity:**

**Acute oral** - Copper carbonate basic Estimated LD50 = 1,350 mg/kg.

**Skin corrosion/irritation:**

Immediate contact may cause irritation.

**Serious eye damage/eye irritation:**

May cause eye irritation.

**Respiratory or skin sensitization:**

No data available.

**Carcinogenicity:**

No data available.

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**Section 11- Toxicological Information (cont.)**

**Germ cell mutagenicity:**

No data available.

**Reproductive toxicity:**

No data available.

**Specific target organ toxicity - single or repeated exposure:**

No data available on the mixture.

**Copper carbonate basic** single exposure: inhalation - may cause respiratory irritation.

**Aspiration hazard:**

No data available.

**Symptoms after inhalation:**

Harmful if inhaled. Can cause irritation of the upper respiratory tract.

**Symptoms after skin contact:**

May cause skin irritation.

**Symptoms after eye contact:**

May cause eye irritation including redness and inflammation.

**Symptoms after ingestion:**

Harmful if swallowed.

**Section 12- Ecological Information**

**Ecotoxicity (aquatic and terrestrial, where available):**

**Toxicity to fish (acute and chronic):**

No data available for the mixture. Individual component data reported.

**EDTA:** LC50: 41 mg/l, exposure time: 96 h, species: *Lepomis macrochirus* (Bluegill sunfish), test type: static test.

**Toxicity to daphnia and other aquatic invertebrates (acute and chronic):**

No data available for the mixture. Individual component data reported.

**EDTA:** EC50: 625 mg/l, exposure time: 48 h, species: *Daphnia magna* (water flea).

**Toxicity to algae:**

No data available.

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**Section 12- Ecological Information (cont.)**

**Persistence and degradability:**

No data available.

**Bioaccumulative potential:**

No data available.

**Mobility in the soil:**

No data available.

**Other adverse effects:**

No data available.

**Section 13 - Disposal Considerations**

**Waste treatment methods - product:**

Dispose in accordance with all local, state and federal regulations. In unused condition, this product is not considered to be a RCRA defined hazardous waste by character/listings. It is the responsibility of the waster generator to evaluate whether this wastes are hazardous by characteristic/listing.

**Waste treatment methods - container:**

Containers should be cleaned of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented incomplete, inaccurate or otherwise inappropriate.

**Section 14 - Transport Information - US DOT, IATA, IMO, ADR:**

<b>Proper Shipping Name:</b>	Fertilizing Compound, NOI, Liquid - Krystal Klear® Cu		
<b>D. O. T. Hazard Class:</b>	Not regulated by D.O.T.	<b>UN #:</b>	N/Ap
<b>Label Requirement:</b>	None	<b>RQ:</b>	N/Ap
<b>Placard:</b>	None	<b>CAS:</b>	Mixture
<b>Packing Group:</b>	N/Ap	<b>ERG Book Information:</b>	Guide # 171
<b>Environment Hazards:</b>	No	<b>Marine Pollutant:</b>	No
<b>Special Precautions:</b>	No	<b>IATA:</b>	Not regulated as dangerous goods.

**Section 15 - Regulatory Information**

**U.S. Federal - OSHA Status:**

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910,1200.

**TSCA Status:**

Listed/Reportable

**SARA Title III Section 302 - EXTREMELY HAZARDOUS SUBSTANCES:**

This product does NOT contain ingredients listed in Appendix A and B as Extremely Hazardous substances.



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Section 15 - Regulatory Information (cont.)

**SARA Title III Sections 311/312:**

Acute Health Hazard

**SARA Section 313 Toxic Chemicals:**

This product contains the following toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act:

**CAS#**            **Chemical Name:**

This material does NOT contain any chemical components with known CAS numbers that exceed the threshold reporting levels.

**SARA Superfund Section 110:**

This product does NOT contain ingredients listed as hazardous substances on the Priority List of CERCLA Hazardous substances.

**CERCLA, 40 CFR 117, 302:**

This product does NOT contain ingredients specified in the List of Extremely Hazardous Substances.

**CERCLA listed substances are:**

Ethylendiamine tetraacetic Acid RQ 5000lbs

**Other Federal Reporting Requirements:**

**CAA:** This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act

**CWA:** No chemicals in product are listed a Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

**RCRA:** Not a hazardous waste under RCRA.

**State Reporting Requirements:**

**State Right to Know Laws:**

CAS#	State RTK	Chemical Name
12069-69-1	PA, CA, NJ	Copper (II) carbonate basic
60-00-4	NJ, PA, MA, CA	Ethylenediaminetetraacetic acid

**CALIFORNIA PROPOSITION 65:**

This product does NOT contain a chemical or chemicals subject to California Proposition 65.

**Michigan Critical Materials:**

This product does NOT contain ingredients listed on the Michigan Critical Materials Register.

**Global Lists/International Inventories:**

**Canada CEPA:** All components are listed on the Canadian DSL

**Canada WHMIS:** WHMIS classification D2B

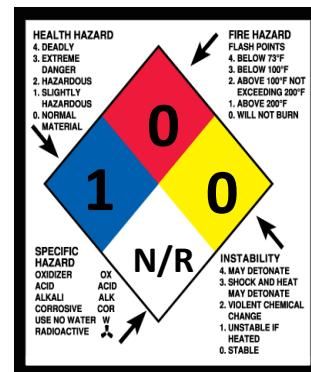


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**Section 16 - Other Information**

**Note Section 3:** Any concentration shown as a range is to protect confidentiality or is due to batch variation.

5-30-2015 SDS reviewed - updated to GHS requirements. This replaces all previous MSDS's -



**Date of last revision:**  
5/30/2015

NOTICE: OSHA STANDARD 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a Hazard Communication Program including training, labeling, Safety Data Sheets, and access to written records. We request that you, and it is your legal duty, make all information in this Safety Data Sheet available to your employees.

**Key Legend Information:**

- |                 |  |         |  |
|-----------------|--|---------|--|
| N/Ap:           | Not Applicable   | ND:     | Not Determined   |
| N/R:            | Not Rated  | NDA:    | No Data Available                                      |
| ACGI:           | American Conference of Gov'ntal Industrial Hygienists  | TLV:    | Threshold Limit Value                                  |
| OSHA:           | Occupational Safety and Health Administration          | TWA:    | Time Weighted Average                                  |
| PEL:            | Permissible Exposure Limit                             | NTP:    | National Toxicology Program                            |
| STEL:           | Short Term Exposure Limit                              | TSCA:   | Toxic Substance Control Act                            |
| IARC:           | International Agency for Research on Cancer            | CERCLA: | Comprehensive Response, Compensation and Liability Act |
| SARA Title III: | Superfund Amendments and Reauthorization Act           | CWA:    | Clean Water Act  |
| CAA:            | Clean Air Act  |         |  |
| RCRA:           | Resource Conservation Recovery Act                     |         |  |
| IATA:           | International Air Transport Association Shipping Info. | IMO:    | International Maritime Organization Shipping Info.     |
| DSL:            | Domestic Substance List (Canada)                       | WHMIS:  | Workplace Hazardous Materials Information System       |

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