COPPER DISODIUM EDTA

SDS Record Number: CSSS-TCO-010-100204

| Printing date: 16/11/2013 | Version 2.1 Revision date: 16/11/2013 | | | | |
|---|---|--|--|--|--|
| 1 Identification of the substance and of the co | ompany/undertaking | | | | |
| | | | | | |
| 1.1 Product identifier: | | | | | |
| Identification on the label/Trade name: | EDTA CuNa2 EDTA CuNa2 | | | | |
| Additional identification: | | | | | |
| Identification of the product: Index Number: | CAS#14025-15-1; EC#237-864-5 Not available | | | | |
| REACH registration No.: | Not available | | | | |
| 1.2 Relevant identified uses of the substar | | | | | |
| 1.2.1 Identified uses: | | | | | |
| Used for carburizing steel, leather tanning, dyein | ng, printing, pharmaceutical. | | | | |
| 1.2.2 Uses advised against: Not available. | | | | | |
| 1.3 Details of the supplier of the safety date | ta sheet: | | | | |
| Supplier(Only representative): | Chemical Inspection & Regulation Service Limited | | | | |
| Supplier(Manufacturer): | Shijiazhuang Jackchem Co., Ltd | | | | |
| Address: | Douyu Industrial Park, Luancheng County, Shijiazhuang City, Hebei Province, P.R.China | | | | |
| Contact person(E-mail): | jackchem@jackchem.com.cn | | | | |
| Telephone: | +86-311-8463 5784 | | | | |
| Fax: | +86-311-8463 6311 | | | | |
| 1.4 Emergency telephone Number: | | | | | |
| +353-41-980 6916 | | | | | |
| Available outside office hours? | YES NO X | | | | |
| 2 Hazards Identification | | | | | |
| | | | | | |
| 2.1 Classification of the substance | | | | | |
| 2.1.1 Classification: | | | | | |
| The substance is classified as following according to 67/ | 548/EEC and REGULATION (EC) No 1272/2008: | | | | |
| | | | | | |
| REGULATION (EC) No 1272/2008 | | | | | |
| Hazard classes/Hazard categories | Hazard statement | | | | |
| N/A | N/A | | | | |
| For full text of H- phrases: see section 2.2. | | | | | |
| | 67/548/EEC | | | | |
| Hazards characteristics | R-Phrases | | | | |
| N/A | N/A | | | | |
| For full text of R- phrases: see section 16. | | | | | |
| 2.1.2 The most important adverse effects | | | | | |
| 2.1.2.1 The most important adverse physicochemical effects: | | | | | |
| Not applicable. | | | | | |
| 2.1.2.2 The most important adverse human health effects: | | | | | |
| Not applicable. | Not applicable. | | | | |

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Printing date: 16/11/2013 2.1.2.3 The most important adverse environmental effects: Not applicable 2.2 label elements Hazard Pictograms: No pictogram is used. Signal Word(S): No signal word is used. Hazard Statement: Not applicable Precautionary Statement: Not applicable 2.3 Other hazards Not available (PBT,vPvB, Substance is an endocrine disruptor etc.) 3 Composition/information on ingredients Substance/Mixture: Substance Ingredient(s):

| Chemical Name | Registration No. | CAS No. | EC No. | Concentration |
|---------------|------------------|------------|-----------|---------------|
| EDTA CuNa2 | N/A | 14025-15-1 | 237-864-5 | ≥99.0% |

4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

4.1.2 In case of skin contact:

Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

4.1.3 In case of eyes contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

4.1.4 In case of ingestion:

Wash out mouth, then dilute by drinking several glasses of water.

4.2 Most important symptoms and effects, both acute and delayed

The product is not classified as hazard to human health.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use media that is appropriate to treat surrounding fire.

Unsuitable extinguishing media: Not available.

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5.2 Special hazards arising from the substance or mixture

May produce toxic fumes upon decomposition.

5.3 Advice for fire-fighters:

Use fire fighting procedure that is appropriate to treat surrounding fire.

6 Accidental release measures

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6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Remove all sources of ignition. Ventilate area of leak or spill.

6.1.2 For emergency responders:

Wear appropriate personal protective equipment as specified in section 8.

6.2 Environmental Precautions:

Avoid disposing directly into the aquatic environment without any operations. Cover with damp absorbent (inert material, sand or soil).

6.3 Methods for Containment and Cleaning up:

Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

6.4 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 information on disposal.

6.5 Additional information:

Hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Handle in well ventilated areas. Eliminate all sources of ignition, and do not generate flames or sparks. Take precautionary measures against static discharges.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a tightly closed light-resistant container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: As Copper

OSHA and NIOSH 0.1mg/m3 for fume and 1 mg/m3 for dust and mist.

ACGIH 0.2 mg/m3 for fume and 1 mg/m3 for dust and mist.

8.1.2 Additional exposure limits under the conditions of use: Not available.

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|--|--|---|--|---------------------------------|--|
| - | | EC-Values: Not availa | ble. | | |
| 8.2 Exposı | ıre controls | | | | |
| 8.2.1 A | opropriate engineer | ing controls: | | | |
| | | on is a satisfactory hea | | or this substance. Howe | ever, if conditions of use creat |
| 8.2.2 lr | ndividual protection | measures, such as p | personal protective | equipment: | |
| Eye/fac | ce protection | Use chemical safety goggles to prevent skin exposure. | | | |
| Hand p | rotection | Wear appreciate gloves to prevent skin exposure. | | | |
| Body p | rotection | Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, appropriate, to prevent skin contact. | | | |
| Respira | atory protection | A NOISE/MSHA jointly approved respirator is advised in the absence of proper environment controls. | | | |
| Therma | al hazards | Wear suitable protec | tive clothing to preve | nt heat. | |
| 8.2.3 E | nvironmental expos | sure controls: | | | |
| Handlir | ng according to local | regulations, Federal ar | nd official regulations | | |
| Physical and | chemical proper | <u>ties</u> | | | |
| 9.1 Informa | ation on basic phy | sical and chemica | l properties | | |
| Ар | pearance: | | Solid | | |
| Co | lour: | | Not available | | |
| Od | our: | | Not available | | |
| Od | our threshold: | | Not available | | |
| pН | : | | ~6.5(@1% soluti | on) | |
| Me | Melting point/range (℃): | | Not available | | |
| Во | Boiling point/range (°C) : | | Not available | | |
| Fla | ish point (℃) : | | Not available | | |
| Ev | aporation rate: | | Not applicable | | |
| Fla | mmability (solid, gas |); | Not flammable | | |
| Ign | ition temperature (°C |): | Not determined | | |
| Up | per/lower flammabilit | y/explosive limits: | Not determined | | |
| Va | pour pressure (20℃) | : | Not determined | | |
| Va | pour density: | | Not applicable | | |
| | lative Density (25°C): | | Not available | | |
| | | | | | |
| Du | lk density (kg/m ³) : | | Not determined | | |
| | lk density (kg/m ³) : ater solubility (g/l): | | Not determined |)a/l | |
| Wa | ater solubility (g/l): | o/w) · | Not determined Appreciable 1200 | Dg/L | |
| Wa n-C | ater solubility (g/l): Dctanol/Water (log Po | , | Not determined Appreciable 1200 Not determined | Dg/L | |
| Wa n-C Au | ater solubility (g/l): Octanol/Water (log Po to-ignition temperatu | re: | Not determined Appreciable 1200 Not determined Not determined | Dg/L | |
| Wa n-C Au De | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition tempera | re: ature: | Not determined Appreciable 1200 Not determined Not determined >200℃ | Dg/L | |
| Wa n-C Au De Vis | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition tempera cosity, dynamic (mPa | re: ature: | Not determined Appreciable 1200 Not determined Not determined >200°C Not determined | Dg/L | |
| Wa n-C Au De Vis Ex | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition tempera cosity, dynamic (mPa plosive properties: | re: ature: | Not determined Appreciable 1200 Not determined Not determined >200℃ Not determined Not determined | Dg/L | |
| Wa n-C Au De Vis Ex Ox | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition tempera cosity, dynamic (mPa | re: ature: | Not determined Appreciable 1200 Not determined Not determined >200°C Not determined | Dg/L | |
| Wa n-C Au De Vis Ex Ox 9.2. Other 1 | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition tempera scosity, dynamic (mPa plosive properties: idising properties: | re: ature: a s) : | Not determined Appreciable 1200 Not determined Not determined >200℃ Not determined Not determined | Dg/L | |
| Wa n-C Au De Vis Ex Ox 9.2. Other Fat | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition temperat cosity, dynamic (mPa plosive properties: idising properties: information : | re: ature: a s) : | Not determined Appreciable 1200 Not determined Not determined >200°C Not determined Not determined Not applicable | Dg/L | |
| Wa n-C Au De Vis Ex Ox 9.2. Other Fat | ater solubility (g/l): Dctanol/Water (log Po to-ignition temperatu composition temperat scosity, dynamic (mPa plosive properties: idising properties: information: solubility(solvent-oil | re: ature: a s) : to be specified) etc: | Not determined Appreciable 1200 Not determined >200°C Not determined Not determined Not applicable | Dg/L | |

10 Stability and reactivity

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|---|--|--|--|--|--|
| 10.1 Reactivity: | | | | | |
| The substance is stable under not | The substance is stable under normal storage and handling conditions. | | | | |
| 10.2 Chemical stability: | 10.2 Chemical stability: | | | | |
| Under normal conditions, the proc Hazardous reactions are not know | duct is stable. No hazardous reaction when handled and stored according to provisions. vn. | | | | |
| 10.3 Possibility of hazardous reaction | ons: | | | | |
| Under normal conditions, not haza | ardous reactions will occur. | | | | |
| 10.4 Conditions to avoid: | | | | | |
| Not Available | | | | | |
| 10.5 Incompatible materials: | | | | | |
| Not Available | | | | | |
| 10.6 Hazardous decomposition proc | lucts: | | | | |
| Nitrous vapors may be produced. | | | | | |
| 11 Toxicological information | | | | | |
| 11.1 Toxicokinetics, metabolism and | distribution | | | | |
| Non-human toxikological data: | Not available | | | | |
| Method: | Not available | | | | |
| Dosis: | Not available | | | | |
| Routes of administration: | Not available | | | | |
| Results: | Not available | | | | |
| Absorption: | Not available | | | | |
| Distribution: | Not available | | | | |
| Metabolism: | Not available | | | | |
| Excretion: | Not available | | | | |
| 11.2 Information on toxicological eff | 11.2 Information on toxicological effects | | | | |
| Acute toxicity: | | | | | |
| LD50(Oral, Rat): LD50(Skin, Rabbit): LD50(Inhalation, Rat): | >1750mg/kg No data available Not available | | | | |
| Skin corrosion/Irritation: | Not classified | | | | |
| Serious eye damage/irritation: | Not classified | | | | |
| Respiratory or skin sensitization: | Not classified | | | | |
| Germ cell mutagenicity: | Not classified | | | | |
| Carcinogenicity: | Not classified | | | | |
| reproductive toxicity: | Not classified | | | | |
| STOT- single exposure: | Not classified | | | | |

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STOT-repeated exposure:

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Not classified

12 Ecological information

Aspiration hazard:

Toxicity:

| Acute | toxicity | Time | Species | Method | Evaluation | Remarks |
|---|----------|--------|---------------|--------------|------------|---------|
| LC50 | N/A | 96h | Fish | OECD 203 | N/A | N/A |
| LC50 | N/A | 48h | Daphnia | OECD 202 | N/A | N/A |
| EC50 | N/A | 96h | Algae | OECD 201 | N/A | N/A |
| Persistence and degradability: No data available. | | | | | | |
| Bioaccumulative potential: | | | No | t available. | | |
| Mobility in soil: | | | No | t available. | | |
| Results of PBT&vPvB assessment: | | nt: No | t applicable. | | | |
| Other adverse effects: | | No | t applicable. | | | |

13 Disposal considerations

13.1 Waste treatment methods

Refer to State Waste Management Authority. According to local regulations, Federal and official regulations.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

14 Transport information

| | Land transport (ADR/RID) | Sea transport (IMDG) | Air transport (ICAO/IATA) |
|--|--------------------------|----------------------|---------------------------|
| UN-Number: | Not regulated | Not regulated | Not regulated |
| UN Proper shipping name: | Not regulated | Not regulated | Not regulated |
| Transport hazard Class: | Not regulated | Not regulated | Not regulated |
| Packaging group: | Not regulated | Not regulated | Not regulated |
| Environmental hazards: | Not regulated | Not regulated | Not regulated |
| Special precautions for user: | See section 2.2 | See section 2.2 | See section 2.2 |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not regulated | Not regulated | Not regulated |

15 Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Relevant information regarding authorization: Relevant information regarding restriction: Other EU regulations: Not applicable.

Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

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| Other National regulations: Not applicable | | | | | |
| Chemical Safety Assessment has been carried out? YES | NO X | | | | |
| 16 Other information | | | | | |
| 16.1 Indication of changes Version 2.1 Amended by EU No. | 0 453/2013 | | | | |
| 16.2 Relevant R- phrases (number and full text): | | | | | |
| Not applicable. | | | | | |
| 16.3 Training instructions: | | | | | |
| Not applicable. | | | | | |
| 16.4 Further information: | | | | | |
| This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product. | | | | | |
| 16.5 Notice to reader: | | | | | |
| | element to other information gathered by them, and should ation to ensure proper use and protect the health and safety | | | | |
| This information is furnished without warranty, and any Sheet, or in combination with any other product or proce | use of the product not in conformance with this Safety Data ess, is the responsibility of the user. | | | | |