

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date 09/15/2015

Reviewed on 09/15/2015

1 Identification

- **Product identifier**
- **Trade name:** Acidified Copper Sulfate
- **Article number:** EZP-001
- **Recommended use and restriction on use**
- **Recommended use:** Additive
- **Restrictions on use:** Contact manufacturer.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
EZ PAK, LLC
P.O. BOX 185
JEFFERSON, GA 30549
- **Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- **Additional information:**

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

- **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-determining components of labeling:**

copper sulphate

- **Hazard statements:**

H302 Harmful if swallowed.

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

- **Precautionary statements:**

P264 Wash thoroughly after handling.

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

P270 Do not eat, drink or smoke when using this product.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

P330 Rinse mouth.

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

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

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system**

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



Health = 2

Fire = 0

Reactivity = 0

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



HEALTH 2 Health = 2

FIRE 0 Fire = 0

REACTIVITY 0 Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment:**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | |
|-----------|--|--------|
| 7758-98-7 | copper sulphate | 70-90% |
| | ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319 | |
| 77-92-9 | citric acid | 10-30% |
| | ⚠ Eye Irrit. 2A, H319 | |

- **Additional information:**

For the listed ingredient(s), the identity and exact percentage(s) are being withheld as a trade secret.

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4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Brush off loose particles from skin.
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed:**
Irritant to skin and mucous membranes.
Irritant to eyes.
- **Danger:** Harmful if swallowed.
- **Indication of any immediate medical attention and special treatment needed:**
Contains copper sulfate. Consult literature for specific antidotes.
Medical supervision for at least 48 hours.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information:** No relevant information available.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Ensure adequate ventilation.
For large spills, wear protective clothing.
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.

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- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
Send for recovery or disposal in suitable receptacles.
- **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.

7 Handling and storage

- **Handling**
- **Precautions for safe handling:**
Prevent formation of dust.
Use only in well ventilated areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Avoid storage near extreme heat, ignition sources or open flame.
No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep containers tightly sealed.
Protect from humidity and water.
This product is hygroscopic.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:** Not required under normal conditions of use.

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- **Protection of hands:**



Protective gloves

- **Material of gloves** Rubber gloves

- **Eye protection:**



Safety glasses

- **Body protection:**

Not required under normal conditions of use.

Protection may be required for spills.

- **Limitation and supervision of exposure into the environment** No relevant information available.

- **Risk management measures** No relevant information available.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General information**

- **Appearance:**

| | |
|-------|--------|
| Form: | Powder |
|-------|--------|

| | |
|--------|------|
| Color: | Blue |
|--------|------|

| | |
|-------|----------------|
| Odor: | Characteristic |
|-------|----------------|

| | |
|-----------------|-----------------|
| Odor threshold: | Not determined. |
|-----------------|-----------------|

| | |
|-----------|--------|
| pH-value: | Acidic |
|-----------|--------|

- **Change in condition:**

| | |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
|------------------------------|---------------|

| | |
|------------------------------|-----------------|
| Boiling point/Boiling range: | Not determined. |
|------------------------------|-----------------|

| | |
|--------------|-----------------|
| Flash point: | Not applicable. |
|--------------|-----------------|

| | |
|--------------------------------|-----------------|
| Flammability (solid, gaseous): | Not determined. |
|--------------------------------|-----------------|

| | |
|----------------------------|-----------------|
| Auto-ignition temperature: | Not determined. |
|----------------------------|-----------------|

| | |
|----------------------------|-----------------|
| Decomposition temperature: | Not determined. |
|----------------------------|-----------------|

| | |
|----------------|-------------------------------|
| Auto igniting: | Product is not self-igniting. |
|----------------|-------------------------------|

| | |
|----------------------|---|
| Danger of explosion: | Product does not present an explosion hazard. |
|----------------------|---|

- **Explosion limits:**

| | |
|--------|-----------------|
| Lower: | Not determined. |
|--------|-----------------|

| | |
|--------|-----------------|
| Upper: | Not determined. |
|--------|-----------------|

| | |
|----------------------|-----------------|
| Oxidizing properties | Not determined. |
|----------------------|-----------------|

| | |
|-----------------|-----------------|
| Vapor pressure: | Not determined. |
|-----------------|-----------------|

| | |
|---------------------------|--|
| Density at 20 °C (68 °F): | 3.4 g/cm ³ (28.373 lbs/gal) |
|---------------------------|--|

| | |
|-------------------|-----------------|
| Relative density: | Not determined. |
|-------------------|-----------------|

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- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
 - Water:** Easily soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **Other information** No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Toxic fumes may be released if heated above the decomposition point.
Reacts with strong alkali.
Reacts with amines.
- **Conditions to avoid:** No relevant information available.
- **Incompatible materials:** No relevant information available.
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Toxic metal oxide smoke
Sulfur oxides (SO_x)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7758-98-7 copper sulphate

Oral | LD50 | 300 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

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· **NTP (National Toxicology Program):**

None of the ingredients are listed.

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

· **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

· **Acute effects (acute toxicity, irritation and corrosivity):**

Harmful if swallowed.
Irritating to eyes and skin.

· **Repeated dose toxicity:** No relevant information available.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

· **Carcinogenicity:** Based on available data, the classification criteria are not met.

· **Reproductive toxicity:** Based on available data, the classification criteria are not met.

· **STOT-single exposure:** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

· **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** Toxic for aquatic organisms

· **Persistence and degradability:** No relevant information available.

· **Behavior in environmental systems**

· **Bioaccumulative potential:** No relevant information available.

· **Mobility in soil:** No relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Very toxic for fish

· **Additional ecological information**

· **General notes:** Do not allow product to reach ground water, water course or sewage system.

· **Other adverse effects:** No relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

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- **Uncleaned packagings**
- **Recommendation:** Disposal in accordance with official regulations.

14 Transport information

- **UN-Number**
- **DOT**
- **ADR, IMDG, IATA**
- **UN proper shipping name**

See Note
UN3077



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

- **DOT**
- **ADR**
- **IMDG**
- **IATA**
- **Transport hazard class(es)**
- **DOT**
- **Class**

See Note
3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper sulphate)
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper sulphate), MARINE POLLUTANT
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper sulphate)

See Note

- **ADR**



- **Class**
- **Label**

9 (M7) Miscellaneous dangerous substances and articles
9

- **IMDG, IATA**



- **Class**
- **Label**
- **Packing group**
- **DOT**
- **ADR, IMDG, IATA**
- **Environmental hazards**
- **Marine pollutant:**
- **Special marking (ADR):**
- **Special marking (IATA):**
- **Special precautions for user**

9 Miscellaneous dangerous substances and articles
9

See Note
III

Product contains environmentally hazardous substances:
copper sulphate

Symbol (fish and tree)

Symbol (fish and tree)

Symbol (fish and tree)

Warning: Miscellaneous dangerous substances and articles

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- **Danger code (Kemler):** 90
 - **EMS Number:** F-A,S-F
 - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.
 - **Transport/Additional information:**
 - **DOT**
 - **Remarks:** Transport labeling is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.
-
- **ADR**
 - **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g
-
- **IMDG**
 - **Excepted quantities (EQ)** Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g
-
- **UN "Model Regulation"** UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (COPPER SULPHATE), 9, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 304 (emergency release notification):**

None of the ingredients are listed.

· **Sections 311/312 (hazardous chemical threshold planning quantity in pounds):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

7758-98-7 | copper sulphate

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

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- **Proposition 65 (California)**

- **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.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

- **Canadian substance listings**

- **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 0.1%):**

None of the ingredients are listed.

- **Canadian Ingredient Disclosure list (limit 1%):**

All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Date of preparation / last revision** 09/15/2015 / -

- **Abbreviations and acronyms:**

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

- **Sources**

Website, European Chemicals Agency ([http://http://echa.europa.eu/](http://echa.europa.eu/))Website, US EPA Substance Registry Services ([http://http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do](http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do))Website, Chemical Abstracts Registry, American Chemical Society (<https://www.cas.org>)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:

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