

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: September 25, 2017

Revision: September 25, 2017

1 Identification

- **Product identifier**
- **Trade name:** Mina Sol
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Industrial uses.
- **Restrictions on use:** Contact manufacturer/supplier

- **Details of the supplier of the Safety Data Sheet**

Manufacturer/Supplier:

EZ PAK, LLC

P.O. BOX 185 JEFFERSON, GA 30549 (706) 367-7341

Distributor:

Clear View Enterprises, LLC

451 Agnes Drive Tontitown, AR 72770 (800) 255-3924

Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**

Met. Corr.1 H290 May be corrosive to metals.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements**

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

- **Hazard pictograms:**



GHS05

- **Signal word:** Danger

- **Hazard statements:**

H290 May be corrosive to metals.

H315 Causes skin irritation.

H318 Causes serious eye damage.

- **Precautionary statements:**

P234 Keep only in original container.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection.

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

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

P310 Immediately call a POISON CENTER/doctor.

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

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P362+P364 Take off contaminated clothing and wash it before reuse.
 P390 Absorb spillage to prevent material damage.
 P406 Store in corrosive resistant container with a resistant inner liner.

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

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Components:**

7758-98-7	copper sulphate ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	10-20%
7647-01-0	hydrochloric acid ⚠ Met. Corr. 1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302; STOT SE 3, H335	<5%

- **Additional information:**

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
 For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Unlikely route of exposure.
 Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Immediately remove any clothing soiled by the product.
 Immediately rinse with water.
 If skin irritation continues, consult a doctor.
 Seek immediate medical help for blistering or open wounds.

- **After eye contact:**

Protect unharmed eye.
 Remove contact lenses if worn, if possible.
 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.

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

Strong irritant with the danger of severe eye injury.
 Gastric or intestinal disorders when ingested.
 Thirst
 Cramp
 Coughing
 Vomiting.
 Diarrhea.

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- **Indication of any immediate medical attention and special treatment needed:**
If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use firefighting 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.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Wear protective equipment. Keep unprotected persons away.
- **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.
- **Methods and material for containment and cleaning up**
Use limestone to neutralize and absorb spill.
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:**
Use only in well ventilated areas.
Avoid breathing mist, vapors, or spray.
Open and handle receptacle with care.
Avoid contact with the eyes and skin.
Keep out of reach of children.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Use only receptacles specifically permitted for this substance/product.
Unsuitable material for receptacle: aluminum.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
Store away from metals.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

7647-01-0 hydrochloric acid

PEL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
REL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm
EL (Canada)	Ceiling limit value: 2 ppm
EV (Canada)	Ceiling limit value: 2 ppm
LMPE (Mexico)	Ceiling limit value: 2 ppm
	A4

- **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.
Wash hands before breaks and at the end of work.
- **Engineering controls:** No relevant information available.
- **Breathing equipment:**
Not required under normal conditions of use.
Use suitable respiratory protective device in case of insufficient ventilation.
Use suitable respiratory protective device when aerosol or mist is formed.
- **Protection of hands:**



Protective gloves

- **Eye protection:**



Safety glasses

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- **Body protection:** Acid resistant protective clothing
- **Limitation and supervision of exposure into the environment**
Avoid release to the environment.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Liquid

Color: Blue

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value:** <5.0

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** Not determined.

· **Decomposition temperature:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Non-oxidizing.

· **Vapor pressure:** Not determined.

· Density:

Relative density: 1.09

Vapor density: Not determined.

Evaporation rate: Not determined.

· Solubility in / Miscibility with

Water: Soluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity

Dynamic: Not determined.

Kinematic: Not determined.

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

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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**
Reacts with oxidizing agents.
Reacts with alkali (lyes).
Corrosive action on metals.
- **Conditions to avoid** Store away from oxidizing agents.
- **Incompatible materials**
Oxidizing agents
Alkalis
- **Hazardous decomposition products**
Toxic metal oxide smoke
Chlorine compounds
Sulfur oxides (SO_x)
Copper oxides.

11 Toxicological information

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

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	>2000 mg/kg

· 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:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Based on available data, the classification criteria are not met.
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer):		
None of the ingredients are listed.		

· 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.

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Eye contact.

Skin contact.

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

Irritating to eyes and skin.

Causes serious eye damage.

May be harmful if swallowed.

- **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 to aquatic life with long lasting effects.

- **Persistence and degradability** No relevant information available.

- **Bio accumulative potential:** No relevant information available.

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

- **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.

- **Uncleaned packaging's**

- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**

- **DOT, ADR, IMDG, IATA**

UN1789

- **UN proper shipping name**

- **DOT, IATA**

Hydrochloric acid solution

- **ADR, IMDG**

HYDROCHLORIC ACID SOLUTION

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- **Transport hazard class(es)**

- DOT



- Class 8 Corrosive substances
- Label 8

- ADR



- Class 8 (C1) Corrosive substances
- Label 8

- IMDG, IATA



- Class 8 Corrosive substances
- Label 8

- Packing group

- DOT, ADR, IMDG, IATA III

- Environmental hazards

Product contains environmentally hazardous substances: copper sulphate

- Marine pollutant:



Yes

- Special precautions for user

Warning: Corrosive substances

- Danger code (Kemmler):

80

- EMS Number:

F-A,S-B

- Segregation groups

Acids

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

- Transport/Additional information:

- DOT See 173.154(d) for corrosive exceptions.

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Limited Quantity for packages less than 30 kg gross and inner packaging's less than 5 L each.

Labeling as a Marine Pollutant is only required for bulk single package shipments. Bulk packaging consists of a maximum capacity of greater than 450 L (119 gallons) for a liquid and a maximum net mass greater than 400 kg (882 pounds) for a solid. (See 171.4(c))

· **ADR**



Limited Quantity for packages less than 30 kg gross and inner packaging's less than 5 L each.

Marine pollutants packaged in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 5.2.1.8.1)

· **IMDG**



Limited Quantity for packages less than 30 kg gross and inner packaging's less than 5 L each.

Marine pollutants packaged in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to provisions relevant to marine pollutants. (See 2.10.2.7)

· **IATA**



Limited Quantity for packages less than 30 kg gross and inner packaging's less than 0.5 L each / 1 L net.

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 355 (extremely hazardous substances):**

7647-01-0	hydrochloric acid
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· **Section 313 (Specific toxic chemical listings):**

7758-98-7	copper sulphate
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7647-01-0	hydrochloric acid
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- **Proposition 65 (California)**

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

- **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.

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

None of the ingredients are listed.

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** September 25, 2017 / -

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

- **Sources**

Website, European Chemicals Agency (echa.europa.eu)Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)

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Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN:
978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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