



# SAFETY DATA SHEET

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Revision Date 09-Jul-2018

Version 2.01

Product No FNG56878-972

Publish Date 09-Jul-2018

AMEX161

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product identifier

## Mastercop

Pure substance/mixture

Mixture

### Relevant identified uses of the substance or mixture and uses advised against

Recommended Use

Fungicide

Uses advised against

No information available

### Details of the supplier of the safety data sheet

Supplier Address

ADAMA Makhteshim Ltd  
PO Box 60  
Beer Sheva 8410001 Israel

For further information, please contact

Email address

SDS@ADAMA.COM

Emergency Telephone

Emergency Telephone

+972-03-6106666 Subscription no. 36789 (ADAMA Makhteshim Ltd.)

## Section 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture

Acute toxicity - Oral

Category 4 - (H302)

Serious eye damage/eye irritation

Category 1 - (H318)

Acute aquatic toxicity

Category 1 - (H400)

Chronic aquatic toxicity

Category 1 - (H410)

### Label Elements

Hazard pictograms



**Signal word**

Danger

**Hazard Statements**

H302 - Harmful if swallowed  
 H318 - Causes serious eye damage  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards**

No information available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical Name	Weight-%	CAS No	EC No	GHS Classification	M-Factor
Copper sulphate pentahydrate	19-24	7758-99-8		Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	M=10 M=10
Ammonium hydroxide	4-8	1336-21-6	215-647-6	Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Acute 1 (H400)	
Acetic acid	24-27	64-19-7	200-580-7	Skin Corr. 1A (H314) Flam. Liq. 3 (H226)	

### Section 4: FIRST AID MEASURES

**First aid measures**

**General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

**Inhalation**

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Consult a physician if necessary.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Seek immediate medical attention/advice.

**Ingestion**

Rinse mouth. Drink plenty of water. Call a physician immediately.

**Self-protection of the first aider** Use personal protective equipment as required.

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

**Symptoms** None known

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

**Note to physicians** Treat symptomatically.

## Section 5: FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

**Special hazards arising from the substance or mixture**

No specific hazard known.

**Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus  
In the event of fire and/or explosion do not breathe fumes.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

**Personal precautions**

Evacuate personnel to safe areas. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

Do not allow into any sewer, on the ground or into any body of water. Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**Reference to other sections**

**Other Information**

See also section 8,13

## Section 7: HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

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

**Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

**Specific end use(s)**

**Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**National occupational exposure limits**

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Acetic acid 64-19-7	TWA 10 ppm TWA 25 mg/m <sup>3</sup>		STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 37 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> Ceiling / Peak: 20 ppm Ceiling / Peak: 50 mg/m <sup>3</sup>
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Ammonium hydroxide 1336-21-6				STEL: 50 ppm STEL: 36 mg/m <sup>3</sup>	
Acetic acid 64-19-7		STEL: 15 ppm TWA: 10 ppm		TWA: 5 ppm TWA: 13 mg/m <sup>3</sup> STEL: 10 ppm STEL: 25 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Acetic acid 64-19-7	STEL 20 ppm STEL 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL: 20 ppm STEL: 50 mg/m <sup>3</sup> TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>	STEL: 30 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 20 ppm STEL: 37.5 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup> STEL: 15 ppm STEL: 37 mg/m <sup>3</sup>

**Exposure controls**

**Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/face protection**

Tight sealing safety goggles.

**Hand Protection**

Gloves made of plastic or rubber.

**Body Protection**

Gloves made of plastic or rubber, Rubber boots, Suitable protective clothing, Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact, Wear chemical resistant clothing such as gloves, apron, boots or whole bodysuits made from neoprene, as appropriate.

**Respiratory protection**

Use only with adequate ventilation.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

**Environmental exposure controls** No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
Physical state	: liquid		
Color	: green		
Odor	: characteristic		
<b>Odor threshold</b>	: No data available		
<b>pH</b>	: 4 – 5.5	CIPAC MT 75	solution (1 %)
<b>Melting point/freezing point °C</b>	: ---		
<b>Boiling point/boiling range °C</b>	: ---		No data available
<b>Flash point °C</b>	: > 95	CIPAC MT 12	CC (closed cup)
<b>Evaporation rate</b>	: Not Applicable		
<b>Flammability (solid, gas)</b>	: Not Applicable		
<b>Upper/lower flammability or explosive limits</b>	: No data available		
<b>Vapor pressure kPa</b>	: No data available		
<b>Vapor density</b>	: No data available		
<b>Relative density</b>	: 1.18 - 1.25	OECD 109	21 °C
<b>Solubility(ies) mg/l</b>	: No data available		
<b>Partition Coefficient (n-octanol/water) Log Pow</b>	:		See Section 12 for more information
<b>Autoignition temperature °C</b>	: No data available		
<b>Decomposition temperature °C</b>	: No data available		
<b>Kinematic viscosity mm<sup>2</sup>/s 40 °C</b>	: Not Applicable		
<b>Explosive properties</b>	: Not an explosive	OPPTS 830.6316	
<b>Oxidizing properties</b>	: Not oxidizing	OPPTS 830.6314	
<b><u>Other Information</u></b>			
<b>Bulk density g/ml</b>	:		
<b>Surface tension mN/m</b>	: Not Applicable		

## Section 10: STABILITY AND REACTIVITY

### Reactivity

Not available.

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Exposure to air or moisture over prolonged periods.

**Incompatible Materials**

No information available

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Section 11: TOXICOLOGY INFORMATION**

**Information on toxicological effects**

**Acute toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	: 1030	Rat	OPPTS 870.1100	
Dermal LD50 mg/kg	: >5050	Rat	OPPTS 870.1200	
Inhalation LC50 mg/l/4h	: > 2.31	Rat	OPPTS 870.1300	Maximum attainable concentration
Skin corrosion/irritation	: Non-irritating to the skin	Rabbit	OPPTS 870.2500	
Serious eye damage/eye irritation	: Irritating to eyes	Rabbit	OPPTS 870.2400	
Respiratory/skin sensitization	: Not a skin sensitizer	Guinea pig	OPPTS 870.2600	

**Chronic toxicity**

**Germ cell mutagenicity**

Chemical Name	
Copper sulphate pentahydrate	: Not classified

**Carcinogenicity**

Chemical Name	.
Copper sulphate pentahydrate	: Not Carcinogenic

**Reproductive toxicity .**

Chemical Name	
Copper sulphate pentahydrate	: Not toxic for the reproductive system

**STOT - single exposure**

Chemical Name	
Copper sulphate pentahydrate	: No data available

**STOT - repeated exposure**

Chemical Name	
Copper sulphate pentahydrate	: No data available

**Aspiration hazard**

Chemical Name	
Copper sulphate pentahydrate	: No data available

**Section 12: ECOLOGICAL INFORMATION**

**Toxicity**

**Aquatic toxicity**

<b>Acute toxicity</b>	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Fish 96-hour LC50 mg/l	: 13.73	Poecilia reticulata		
Crustacea 48-hour EC50 mg/l	: ----			No data available
Algae 72-hour EC50 mg/l	: ----			No data available
Other plants EC50 mg/l	: ----			No data available

Terrestrial Toxicity  
Birds Oral LD50 mg/kg

Bees Oral LD50 µg/bee

Persistence and degradability

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Abiotic Degradation Water DT50 days			
Soil DT50 days			

Biodegradation

Bioaccumulative potential

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Partition Coefficient (n-octanol/water) Partition Coefficient (n-octanol/water) Log Pow			

Bioconcentration factor (BCF)

Mobility in soil

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Adsorption/Desorption			

Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

Other adverse effects

No information available.

**Section 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORTATION INFORMATION**

IMDG/IMO

UN/ID No *	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Copper sulfate pentahydrate )
Hazard Class	9
Packing Group	III
Marine pollutant	Yes
Special precautions for user	

RID/ADR

UN/ID No *	3082
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**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Copper sulfate pentahydrate )  
**Hazard Class** 9  
**Packing Group** III  
**Environmental hazard** Yes  
**Special precautions for user**

**ICAO/IATA**

**UN/ID No \*** 3082  
**Proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Copper sulfate pentahydrate )  
**Hazard Class** 9  
**Packing Group** III  
**Environmental hazard** Yes  
**Special precautions for user**  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not Applicable



\* Note: UN3077 & UN3082 – These products may be transported as non-dangerous goods under the special provisions of IMDG Code 2.10.2.7; ADR SP375 and ICAO/IATA A197 when packed in single or inner packaging of up to 5L for liquids or 5 kg or less for solids.

## Section 15: REGULATORY INFORMATION

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

## Section 16: OTHER INFORMATION

**Revision Note** Changes made to the last version are labeled with this sign \*\*\*.

### List of Acronyms

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
CAS Number - Chemical Abstracts Service number  
EC Number - EINECS and ELINCS Number  
EINECS - European Inventory of Existing Commercial Substances  
ELINCS - European List of notified Chemical Substances  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
OECD - Organization for Economic Co-operation and Development  
PBT - Persistent, Bioaccumulative and Toxic substance  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
STOT - Specific Target Organ Toxicity  
vPvB - Very Persistent and Very Bioaccumulative

### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing,

storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet