

SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

2019 Version:

Date Updated: June 19, 2019

SECTION 1. - - - - - PRODUCT AND COMPANY IDENTIFICATION - - - - - - -

Copper (II) acetate hydrate **Product Name**

CB3050 Product Code(s)

For Laboratory Research Use Only **Recommended Use**

Not for Human or Animal Drug Use

Supplier Bio Basic Inc.

Address 20 Konrad Crescent, Markham, Ontario,

Canada, L3R 8T4

Telephone (905) 474 4493 Fax (905) 474 5794 For Chemical Emergency Phone# (416) 995 9730

SECTION 2. ----- HAZARDS IDENTIFICATION -----

2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Acute toxicity, Oral (Category 4), H302 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1),

H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

Causes severe skin burns and eye damage. H314 Very toxic to aquatic life with long lasting effects. H410

Precautionary statement(s)

Do not breathe dust or mist. P260

P264 Wash skin thoroughly after handling.

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

P273 Avoid release to the environment.

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

protection.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. P303 + P361 + P353

Rinse skin with water.

QF26 Rev 2 1 P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363

P391

Collect spillage.

P405

Store locked up.

Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

Chemical Name	EC No.	CAS-No	Weight %
Copper (II) acetate hydrate	205-553-3	6046-93-1	<100

SECTION 4. ----- FIRST-AID MEASURES-----

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES - - - - - -

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7. ----- HANDLING AND STORAGE-----

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - -

Control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eve/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

Information on basic physical and chemical properties

a) Appearance Form: solid

Colour: greenish-blue

b) Odour odourless

c) Odour Threshold No data available

d) pH 5.2 - 5.5 at 20 g/l at 20 °C (68 °F)

e) Melting point/freezing

point

Melting point/range: 115 °C (239 °F)

f) Initial boiling point and

boiling range

No data available

g) Flash point No data available
h) Evaporation rate No data available
i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits No data available

k) Vapour pressure No data availablel) Vapour density No data available

m) Relative density 1.882 g/cm3 at 20 °C (68 °F) n) Water solubility 70 g/l at 20 °C (68 °F) - soluble

o) Partition coefficient: n-

No data available

octanol/water p) Auto-ignition

on No data available

temperature

q) Decomposition No data available temperature

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

Other safety information

Bulk density 1,000 kg/m3

SECTION 10. ------STABILITY AND REACTIVITY -----

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Copper oxides Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - > 300 - < 2,000 mg/kg (Fixed Dose Method)

Inhalation: No data available

LD50 Dermal - Rat - > 2,000 mg/kg (OECD Test Guideline 402)

No data available

Skin corrosion/irritation

Skin - EPISKIN Human Skin Model Test Result: Causes burns. (OECD Test Guideline 431)

Serious eye damage/eye irritation

Eves - Rabbit

Result: Risk of serious damage to eyes. (OECD Test Guideline 405)

Respiratory or skin sensitisation

Maximisation Test - Guinea pig Does not cause skin sensitisation. (OECD Test Guideline 406) Remarks: No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: AG3500000

Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice,

convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis., Cough, Shortness of breath, Headache, Nausea, Vomiting, Gastrointestinal disturbance, Blood disorders, Liver injury may occur., Damage to the lungs.

Stomach - Irregularities - Based on Human Evidence

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 0.39 mg/l - 96.0 h

Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14. ----- TRANSPORT INFORMATION -----

TDG (Canada)

UN number: 1759 Class: 8 Packing group: II Proper shipping name: CORROSIVE SOLID, N.O.S.

ves

Poison Inhalation Hazard: No

IMDG

UN number: 1759 Class: 8 Packing group: II EMS-No: F-A, S-B Proper shipping name: CORROSIVE SOLID, N.O.S. (Copper di(acetate))

Marine pollutant:yes

IATA

UN number: 1759 Class: 8 Packing group: II Proper shipping name: Corrosive solid, n.o.s. (Copper di(acetate))

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SECTION 15. ----- REGULATORY INFORMATION ------

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16. ----- OTHER INFORMATION-----

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
Eye Dam. Serious eye damage
H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

Further information: no limited for paper copy, just for internal uses.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS