SAFETY DATA SHEET



Revision date 20-Oct-2020 Revision Number 2

1. Identification

Product identifier

Product Name Nu-Cop HB

Other means of identification

Product Code(s) 42750-132

Synonyms None

EPA Registration Number(s) 42750-132

Recommended use of the chemical and restrictions on use

Recommended use Fungicide

Restrictions on use Follow label instructions

Details of the supplier of the safety data sheet

Company Address

ALBAUGH , LLC Ankeny, IA 50211

Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Harmful if swallowed Fatal if inhaled

Causes serious eye damage



Appearance granules

Physical state Solid

Odor Slight

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear respiratory protection

Wear eye protection/ face protection

Precautionary Statements - Response

Specific treatment is urgent (see .? on this label)

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 or doctor

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

3.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

13.2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information

May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret	Active Ingredient
Copper hydroxide	20427-59-2	74.5-79.1	*	X
1,2,3-Propanetriol	56-81-5	0.9-1.1	*	
Other Ingredients	PROPRIETARY	>20.0	*	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Inhalation If breathing has stopped, give artificial respiration. Get medical attention immediately.

Remove to fresh air. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if

symptoms occur.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Call a physician or poison control

center immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more

information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

No information available.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment for Firefighters should wear self-contained breathing apparatus and full firefighting turnout

fire-fighters gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid generation of

dust. Do not breathe dust. Use personal protective equipment as required. Evacuate

personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not breathe dust. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Copper hydroxide	TWA: 1 mg/m³ Cu dust and mist	-	IDLH: 100 mg/m³ Cu dust and
20427-59-2			mist
			TWA: 1 mg/m³ Cu dust and
			mist
1,2,3-Propanetriol	-	TWA: 15 mg/m³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m ³ mist, respirable	
		fraction	
		(vacated) TWA: 10 mg/m ³	
		mist, total particulate	
		(vacated) TWA: 5 mg/m ³ mist,	
		respirable fraction	

Biological occupational exposure limits

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This product, as supplied, does not contain any hazardous materials with higherical limits established by the region specific

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Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and

eye/face protection. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical stateSolidAppearancegranulesColorblueOdorSlight

Odor threshold No information available

Property Values Remarks • Method

No data available

6.9 7.9

Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate

No data available
No data available
No data available

Flammability (solid, gas) Flammability Limit in Air

Upper flammability or explosive No data available

limits

pН

Lower flammability or explosive No data available

limits

Vapor pressureNo data availableVapor densityNo data availableRelative densityNo data availableWater solubilityNo data availableSolubility(ies)No data availablePartition coefficientNo data availableAutoignition temperatureNo data available

Decomposition temperature

Kinematic viscosity

No data available

No data available

No data available

Other information

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Explosive properties No information available Oxidizing properties No information available Softening point No information available Molecular weight No information available **VOC Content (%)** No information available **Liquid Density** 0.61-0.65

No information available **Bulk density**

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Excessive heat.

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on

components).

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye

damage. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation. May be

harmful in contact with skin.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on

components).

Symptoms related to the physical, chemical and toxicological characteristics

Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause **Symptoms**

blindness.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document ...

ATEmix (oral) 568.0842 mg/kg ATEmix (dermal) 2,669.30 mg/kg 0.0508 mg/l ATEmix (inhalation-dust/mist)

Unknown acute toxicity

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13.2 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Copper hydroxide 20427-59-2	= 489 mg/kg (Rat)	> 2000 mg/kg (Rat)> 3160 mg/kg (Rabbit)	0.205 - 1.08 mg/L (Rat)4 h
1,2,3-Propanetriol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³ (Rat)1 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes burns. Risk of serious

damage to eyes.

Respiratory or skin sensitization

Germ cell mutagenicity

No information available. No information available.

Reproductive toxicity

No information available.

STOT - single exposure STOT - repeated exposure

No information available. No information available.

Target organ effects

liver, kidney, Respiratory system, Eyes, Skin.

Aspiration hazard

No information available.

Other adverse effects

No information available.

Interactive effects

No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
1,2,3-Propanetriol	-	LC50: 51 - 57mL/L (96h,	-	EC50: >500mg/L (24h,
56-81-5		Oncorhynchus mykiss)		Daphnia magna)

Persistence and degradability Bioaccumulation

No information available.
There is no data for this product.

Component Information

Chemical name	Partition coefficient
1,2,3-Propanetriol	-1.76
56-81-5	

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

products

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.

14. Transport information

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. Regulatory information

U.S. EPA Label Information

EPA Pesticide Registration Number 42750-132

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Copper hydroxide - 20427-59-2	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper hydroxide 20427-59-2	-	Х	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Copper hydroxide 20427-59-2	X	-	Χ
1,2,3-Propanetriol 56-81-5	X	Х	Х
Water 7732-18-5	-	-	Х

16. Other information

NFPA Health hazards 4 Flammability 0 Instability 0 Physical and chemical properties
HMIS Health hazards 4 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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Revision Note No information available.

Disclaimer

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End of Safety Data Sheet