

Safety Data Sheet

According to the International Organization for Standardization, ISO 11014:2009

www.kimleigh.com

TEL: | +27 18 293 1028: | +27 18 285 1014



Reg. No. 1974/000531/07

PO Box 1097 | Potchefstroom | 2520 | South Africa

11 Jasper vd Westhuizen Str | Potchindustria | Potchefstroom | 2531

Trade name: Tribasic Copper Chloride (WP)

Product range:

ANIMADE

FERTION
Growing with

SECTION 1: Chemical Product and Company Identification

1.1 Product identifier:

Product name : Tribasic Copper Chloride (WP)
Chemical formula : $\text{Cu}_2(\text{OH})_3\text{Cl}$
Chemical Family : Inorganic metal chlorides
Synonyms : Basic copper chloride, copper oxychloride, dicopper chloride trihydroxide
Molar mass : 213.54 g/mol
CAS number : 1332-40-7
EC number : 215-572-9

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses

Animal feeds, fertilizers.

1.3 Details of the supplier of the safety data sheet:

Supplier:

Kimleigh Chemicals SA (Pty) Ltd

11 Jasper van der Westhuizen Street, Potchindustria, Potchefstroom, North West Province, 2531, South Africa

Tel no: +27 (18) 293-1028

Fax no: +27 (18) 294-4079

Web : www.kimleigh.com

E-mail : sheq@kimleigh.co.za

1.4 Emergency telephone number:

Kimleigh Chemicals SA (Pty) Ltd: Tel: +27 (18) 293-1028

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SECTION 2: Hazards Identification

2.1. Classification of the substance:

Classification according to the Global Harmonized System (GHS):	Code:	Pictogram:	Signal word:
Health hazards: Harmful if swallowed. Causes serious eye damage.	H302 H318	 GHS09	Warning
Environmental hazards: Very toxic to aquatic life with long lasting effect.	H410	 GHS07	

Precautionary statements:

- P501 : Dispose of contents/container in accordance with local / regional / national / international regulations.
- P280 : Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 : If swallowed immediately call a poison center or doctor/physician.
- P305+P351+P338 : If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P315 : Get immediate medical advice/attention.

2.2 Potential health effects:

Routes of entry: Eye contact, inhalation, ingestion, absorbed through skin. Reactions are not likely to occur, unless dose is extraordinary.

Eyes: Copper chloride compounds have been reported as causing eye irritation, which may be an allergic reaction.

Skin: Copper chloride compounds have been reported as causing skin irritation, which may be an allergic reaction. Discoloration of skin may occur but is not indicative of injury.

Inhalation: Negligible toxicity.

Ingestion: Harmful if swallowed. It may cause irritation and/or a burning sensation in the mouth, pharynx, oesophagus and gastrointestinal tract.

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2.3 Potential chronic health effects:

Carcinogenic effects: No component of this product presented at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Mutagenic effects: Not suspected.

Tertogenic effects: Not suspected. Animal studies did not detect any teratogenic effects.

SECTION 3: Composition/Information on Ingredients

3.1 Substance:

Substance name: Tribasic copper chloride (WP)

Appearance: White/odourless powder

Active ingredient: 50 % Cu minimum (m/m)

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General information

Consult a physician. Show this material safety data sheet to doctor in attendance.

Following inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Following skin contact

In case of contact, immediately flush skin with soap and plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation persists.

Following eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Following ingestion

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth with water. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

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SECTION 5: Firefighting Measures

Products of combustion:

Oxides of copper and chlorine compounds.

Explosion hazards in presence of various substances:

Risk of explosion of the product in the presence of static discharge: **NO**.

Risk of explosion of the product in presence of mechanical impact: **NO**.

Firefighting media and instructions:

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

Protective clothing (Fire):

Wear NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

Special remarks on fire hazards:

Prevent fire-fighting water from entering surface water or groundwater.

Special remarks on explosion hazards:

Fine dust may form an explosive mixture if source of ignition is present.

SECTION 6: Accidental Release Measures

Personal Protection:

Hands: Nitrile rubber gloves.

Eyes: Splash goggles.

Body: Protective work clothing.

Feet: Safety boots.

Wear appropriate respiratory and personal protection equipment. Isolate spill area and provide ventilation. Avoid dust formation. Avoid breathing vapours, mist or gas. Scoop or vacuum up spill using a vacuum system equipped with a high efficiency particulate air (HEPA) filtration system and place in a properly labeled closed container for further handling and disposal.

Small spill:

Use appropriate tools and personal protective equipment. Pick up spillage. Dispose of in a waste disposal container. Do not allow to enter sewerage system.

Large spill:

Use appropriate tools and personal protective equipment. Contain material. Take up spillage limiting generation of dust. Dispose of in a waste disposal container. Do not allow to enter sewerage system.

Environmental Precautions:

Do not allow to enter drains or to be released to the environment.

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SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Protective measures

Advice on safe handling

Handle with care in accordance with good industrial hygiene and safety practices. Avoid inhalation of mist. Avoid contact with eyes and skin and any form of ingestion. Wear suitable protective clothing such as overalls, boots, rubber gloves, goggles, nose and mouth protection and wash contaminated clothing daily. Wash thoroughly with soap and water after use or accidental skin contact. Do not eat, drink or smoke during use. Avoid contamination of food, foodstuffs, eating utensils and drinking water. Do not discharge residues or any of the product into rivers, dams and canals.

Advice on safe storage

Store in a cool, dry and well-ventilated place away from food, foodstuffs combustible materials and incompatible substances. Close container tightly after opening. Store under lock and key and keep out of reach of children, uninformed persons and animals. Access to water and eye wash facility should be available.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Protective clothing should be selected specifically for the working place, depending on concentration and quantity of substance handled.

Respiratory Protection: Use MSHA/NIOSH approved respirator when dust or fumes are present.

Eye Protection: Safety glasses

Skin Protection: Impermeable gloves, protective work clothing as necessary.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices. Remove and wash contaminated clothing. Wash hands after use and before eating or smoking. Wash promptly if skin becomes contaminated or wet.

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Personal protection in case of a large spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:

Physical state: Fine powder

Colour: Green

Odour: Odourless

pH (50 g/ℓ H₂O solution at 20°C): 6.9 in water (measured by EPA method SW846-9045)

9.2 Other information:

Boiling point: Not available

Melting point: 250 °C

Vapour pressure: Not available

Thermal decomposition: Decomposes if heated above 220°C. Decomposes on heating in alkaline media with the formation of toxic copper oxides.

Bulk density: 0.7-0.8 kg/ℓ

Solubility: Water dispersible

SECTION 10: Stability and Reactivity

10.1 Reactivity and stability

The product is stable under recommended conditions of storage and use.

10.2 Hazardous decomposition products

Toxic copper chloride forms.

10.3 Incompatibility with various substances

Incompatible with mercury containing compounds, thiram, DNOC, lime sulphur and dithiocarbamates.

10.4 Hazardous Polymerization

Will not occur.

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10.5 Conditions of instability

High temperatures will cause decomposition. Material is hygroscopic – avoid contact with moisture. Do not store in contact with alkalis and oxidizing agents.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects:

	Effect dose / concentration	Value(s)	Species
Acute oral toxicity	LD50	1,694 mg/kg	Rat
Acute dermal toxicity	LC50	2,400 mg/kg	Rat

11.2 Other information:

Acute and chronic effects on humans:

Following inhalation

May be harmful if inhaled. Inhalation may cause damage or irritation of respiratory tract. Symptoms can include irritation of nasal passages, sore throat, shortness of breath and coughing.

Following skin contact

Skin irritant.

Following eye contact

Harmful in case of eye contact (irritant).

Following ingestion

Harmful if swallowed. It can cause irritation and/or a burning sensation in the mouth, pharynx, oesophagus and gastrointestinal tract.

Carcinogenicity:

No component of this product presented at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Toxicity to reproductive system:

Not available.

Mutagenic effects:

Not suspected.

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SECTION 12: Ecological Information

Ecotoxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Fish: Carp LC50: 2.2 mg/l (48h)

Daphnia: *Daphnia magna* LC50: 3.5 mg/l (24h)

Algae: *Pseudokirchneriella subcapitata* (IC50): 0.17 mg/l (72h)



Mobility: Do not allow to enter water or soil.

SECTION 13: Disposal Considerations

13.1 Treatment:

Consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal site (TDS) to assure compliance with all current, local, national, and governmental regulations.

SECTION 14: Transport Information

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN No.	2775	2775	2775	2775
14.2 UN Proper shipping name	Copper based pesticide, solid, toxic.	Copper based pesticide, solid, toxic.	Copper based pesticide, solid, toxic.	Copper based pesticide, solid, toxic.
14.3 Transport hazard class(es)	Class 6.1	Class 6.1	Class 6.1	Class 6.1
Hazard label(s)	 GHS09			
14.4 Packing group	III	III	III	III
14.5 Transport label				

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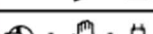
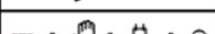















Section 15: Regulatory Information

Republic of South Africa Regulations:

National Water Act 36 of 1998. Occupational Health and Safety Act, 1993. Environmental Conservation Act 73 of 1989. Hazardous Substances Act, 1973. Provincial Ordinances and Local By-laws.

SECTION 16: Other Information

16.1 Hazardous Material Identification System

HAZARD INDEX			PERSONAL PROTECTION INDEX			
4	Severe Hazard		A		G	
3	Serious Hazard		B		H	
2	Moderate Hazard		C		I	
1	Slight Hazard		D		J	
0	Minimal Hazard		E		K	
* An asterisk or other designation corresponds to additional information on a data sheet or separate chronic effects notification			F		X	Consult your supervisor or S.O.P. for "Special" handling directions
HEALTH 0 2			A		n	
FLAMMABILITY 0			o		p	
PHYSICAL HAZARD 0			q		r	
Personal Protection C			S		t	
			u		w	
			y		z	

16.2 Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with the International Organization for Standardization.

16.4 Disclaimer:

KIMLEIGH CHEMICALS SA (Pty) Ltd provides the information contained herein in good faith but does not assume any liability whatsoever for its accuracy or completeness. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.