


Material Safety Data Sheet

(This document conforms to ISO 11014-1)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Supplier / Manufacturer: 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 Email: sales@kimleigh.co.za



Chemical Name: AqCua® Pool.
Chemical Family: Copper based swimming pool chemicals.
Molecular Formula: Proprietary Information.
Product Range: AqCua®.
Synonyms: None.
Material Uses: Algaecide, pool disinfectant, water clarifier.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance Name: AqCua® Pool
Appearance: Light bluish-green powder.

| Hazardous Ingredients: | Ingredients | Content | GHS Classification |
|------------------------|---------------------|-----------|--------------------------|
| | Aluminium compounds | 10 – 35 % | H302,315,318,319,400,410 |
| | Zinc compounds | 10 – 50 % | H302,315,318,319,400,410 |
| | Copper compounds | 10 – 35 % | H302,315,318,319,400,410 |
| | Inert compounds | 1 – 25 % | |

3. HAZARD IDENTIFICATION

Physical State and Appearance: Light bluish-green powder.
 The product should be handled with care usual when dealing with chemicals.

EC Classification: N Dangerous for the environment.
 Xn Harmful.
 Xi Irritant.

GHS Classification:

| | |
|-------|---|
| H302: | Harmful if swallowed. |
| H315: | Causes skin irritation. |
| H318: | Causes serious eye damage. |
| H319: | Causes serious eye irritation. |
| H400: | Very toxic to aquatic life. |
| H410: | Very toxic to aquatic life with long lasting effect. |
| P261 | Avoid breathing dust / fume / gas / mist / vapours / spray. |
| P273: | |
| P280: | Avoid release to the environment. |

P302, P352: Wear protective gloves / eye protection / face protection.
 If on skin – wash with plenty of soap and 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.

Pictogram:



Signal word:

Warning

Warning

Danger

Routes of Entry:

Eye Contact. Inhalation. Ingestion. Absorbed through skin.

Potential Health Effects:

Eyes Risk of serious damage to eyes. Can cause eye irritation and local inflammation. Other symptoms include stinging, tearing and redness.

Skin Causes skin irritation.

Inhalation Inhalation of dust may cause irritation or damage to respiratory tract. Other symptoms can include irritation of nasal passages, sore throat, shortness of breath and coughing. Metal-fume fever may occur after inhalation of large quantities.

Ingestion Harmful if swallowed. It can cause irritation and/or a burning sensation in the mouth, pharynx, oesophagus and gastrointestinal tract. Symptoms may include abdominal pain, nausea, vomiting and diarrhoea. Metallic taste may occur. Target organs: kidney, liver, pancreas and lungs.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS:
 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.

MUTAGENIC EFFECTS:
 Not suspected.

TERATOGENIC EFFECTS:
 Not suspected.

4. FIRST AID MEASURES

General Advice:

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

Eye Contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and

easy to do. Continue rinsing. Cold water may be used. Get medical attention immediately.

Skin Contact:

In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation persists.

Inhalation:

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

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. 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.

5. FIRE-FIGHTING MEASURES

Flammability of Product: Non-combustible.

Auto-ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Oxides of sulphur, zinc, copper and aluminium.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of static discharge: No.
Risks of explosion of the product in presence of mechanical impact: No.

Fire Hazards in Presence of Various Substances: When heated to decomposition it emits toxic fumes of sulfur oxides (SO_x).

Fire Fighting Media and Instructions:
Small fire: Use dry chemicals, CO₂, alcohol-resistant foam or water spray.
Large fire: Use alcohol-resistant foam, water spray or fog.

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: Not available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Avoid substance contact and inhalation. Avoid dust formation. Ensure adequate ventilation.

Environmental Protection Measures: Do not allow to enter sewerage system.

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.

7. HANDLING AND STORAGE

Handling: Handle with care. Minimise dust generation. Avoid inhalation of dust. 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. Use dust mask or respirator with dust cartridge. 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.

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

8. EXPOSURE CONTROL / PERSONAL PROTECTION

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 the substance handled.

Eyes Splash goggles/safety glasses with side shields.

Body Body covering clothing / full suit.

Respiratory Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves, nitrile rubber gloves.

Feet Boots.

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.

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 the product. Suggested protective clothing might not be sufficient; consult a specialist **BEFORE** handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance: Light bluish-green powder.

pH (10g / 100mℓ): 2.13

Boiling Point: Not available.

Melting Point: Not available.

Bulk density (not compacted): 1.05 g/mℓ

Vapour Pressure: Not available.

Vapour Density: Not available.

Volatility: Not available.

Odour Threshold: Not available.

Odour: Slight acidic.

Evaporation Rate: Not available.

VOC: Not available.

Solubility in water (20 °C): Not available.

10. STABILITY AND REACTIVITY

Stability and Reactivity: This product is stable under recommended conditions of storage and use.

Conditions of Instability: Material is hygroscopic – avoid contact with moisture.

Incompatibility with Various Substances: Avoid contact with strong oxidising agents, powdered metals, acids, alkali.

Hazardous Decomposition Products: Toxic sulphur dioxide fumes. Zinc oxides. Copper oxides. Aluminium oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicity: Acute oral toxicity (LD50): 4,287 mg/kg [RAT] calculated.

Chronic Effects on Humans: CARCINOGENIC EFFECTS:
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.

MUTAGENIC EFFECTS:

Not suspected.

TERATOGENIC EFFECTS:

Not suspected.

Acute Effects on Humans:

Harmful in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering and itching.

Risk of corneal clouding, conjunctivitis.

Skin irritant. Skin inflammation is characterized by itching, scaling, reddening or, occasionally blistering.

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.

Metal-fume fever may occur after inhalation of large quantities.

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

Other symptoms may include abdominal pain, nausea, vomiting and diarrhoea.

**Synergetic Products:
(Toxicologically)**

Not available.

Irritancy:

Draize Test: Not available.

Sensitization:

Not available.

**Toxicity to Reproductive
System:**

Tests on laboratory animals for reproductive effects are cited in Registry of Toxic Effects on Chemical Substances (RTECS).

12. ECOLOGICAL INFORMATION

Ecotoxicity:

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

Fish: *Onchorhynchus mykiss* (LC50) 0.11 mg/l (96 h)

Daphnia: *Daphnia Magna* (EC50) 0.024 mg/l (48h)

BOD5 and COD:

Not available.

Biodegradable / OECD:

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

Mobility:

Do not allow to enter water or soil.

**Toxicity of the Products of
Biodegradation:**

Not applicable.

13. DISPOSAL CONSIDERATIONS

EPA Waste Number: Not available.

Treatment: Material does not have an EPA Waste Number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact a permitted waste disposal site (TSD) to assure compliance with all current, local, national, state, Federal and Governmental Regulations.

14. TRANSPORT INFORMATION

Land Transport: *ADR / RID*
9/UN3077/PGIII
Environmentally hazardous substance, solid, n.o.s. *AqCua*[®]
Pool.

Marine Transport: *IMDG*
9/UN3077/PGIII
Environmentally hazardous substance, solid, n.o.s. *AqCua*[®]
Pool.

Air Transport: *IATA*
9/UN3077/PGIII
Environmentally hazardous substance, solid, n.o.s. *AqCua*[®]
Pool.

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.

GHS Labelling:



Warning



Warning



Danger

Hazard Statements: H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effect.

Precautionary Statements: P261: Avoid breathing dust / fume / gas / mist / vapours / spray.
P273: Avoid release to the environment.
P280: Wear protective gloves / eye protection / face protection.
P302, P352: If on skin – wash with plenty of soap and

P305, P351, P338: water.
If in eyes – rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

16. OTHER INFORMATION

Label Requirements: Keep away from food and foodstuffs.

Emergency Contact: KIMLEIGH CHEMICALS SA (PTY) LTD
TEL NO. +27 (18) 293-1028

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.*