Zinc Metalin 700

Material Safety Data Sheet

(This document conforms to ISO 11014-1)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Supplier / Manufacturer:

KIMLEIGH CHEMICALS SA (PTY) LTD

Kimleigh Chemicals SA (Pty) Ltd
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Chemical Name: Zinc Metalin 700.

Molecular Formula: Proprietary Information.

Product range: Fertion.

Chemical Family: Agricultural micronutrient.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Substance Name: Zinc Metalin 700.

Appearance: White liquid suspension.

Hazardous Ingredients:

Ingredients	Content	GHS Classification
Zinc	25 – 95 %	H410

3. HAZARD IDENTIFICATION

Physical State and Appearance: White liquid suspension concentrate.

GHS Classification:
H410: Very toxic to aquatic life with long lasting effect.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Pictogram:

Signal word: Warning Warning

Routes of Entry: Eye Contact. Inhalation. Ingestion. Absorbed through skin.

Potential Health Effects:

Eyes May cause mild eye irritation.

Skin May cause mild skin irritation.

Inhalation May cause mild irritation to respiratory tract.

Ingestion It may cause mild irritation and/or a burning sensation in the mouth, pharynx, esophagus and gastrointestinal tract. Symptoms may include abdominal pain, nausea, vomiting and diarrhoea.

Potential Chronic Health Effects:	CARCINOGENIC EFFECTS: Not suspected. 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. Cold water may be used. Get medical attention immediately.
Skin Contact:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes 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

Products of Combustion:	Oxides of carbon; oxides of zinc.
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 Fighting Media and Instructions:	Small fire: Use dry chemicals, CO_2, alcohol-resistant foam or water spray. Large fire: Water spray or fog, alcohol-resistant foam. Use water spray to cool containers.
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, ingestion and inhalation. Ensure adequate ventilation.
Environmental Protection Measures:	Do not allow to enter sewerage system.
Small Spill:	Wear personal protective equipment. Use appropriate tools and adsorptive material to contain and adsorb the spilled solution and dispose of in a convenient waste disposal container.
Large Spill:	Use appropriate tools and personal protective equipment. Stop leak if without risk. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dyke if needed. Absorb with liquid binding material like sand, universal binders. Call for assistance on disposal.

7. HANDLING AND STORAGE

Handling:	Handle with care in accordance with good industrial hygiene and safety practices. Minimise mist generation. 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 product or residues into rivers, dams and canals.
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. Minimise mist 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 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.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance:	White liquid suspension concentrate.
Odour:	Odourless.
pH:	7.3 – 7.5
Boiling Point:	> 100 ˚C
Freezing Point:	< 0 ˚C
Relative density (20 ºC):	± 1.74 kg / ℓ
Vapour Pressure:	Not applicable.
Vapour Density:	Not applicable.
Volatility:	Not applicable.
Odour Threshold:	Not applicable.
Evaporation Rate:	Not applicable.
VOC:	Not applicable.
Solubility in water (20 ºC)	Product is miscible with water.

10. STABILITY AND REACTIVITY

Stability and Reactivity:	The product is stable under recommended conditions of storage and use.
Conditions of Instability:	High temperatures. Store away from strong oxidizing agents, acids and strong bases.
Incompatibility with Various Substances:	Strong oxidizing agents, acids and bases.
Hazardous Decomposition Products:	Oxides of carbon and zinc.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicity:	Acute oral toxicity (LD50):	5,000 mg/kg [RAT].

Chronic Effects on Humans:	CARCINOGENIC EFFECTS: Not suspected. MUTAGENIC EFFECTS: Not suspected. TERATOGENIC EFFECTS: Not suspected.
Acute Effects on Humans:	Mild eye irritant. Mild skin irritant. Inhalation may cause mild irritation to respiratory tract. It may cause mild irritation and/or a burning sensation in the mouth, pharynx, oesophagus and gastrointestinal tract.
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.
Phytotoxicity:	Zinc is an essential micronutrient for healthy plant growth, but can be harmful in large quantities to zinc sensitive plants.
Mobility:	Product is miscible with water.

13. DISPOSAL CONSIDERATIONS

Treatment:	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, and Governmental regulations.

14. TRANSPORT INFORMATION

Land Transport:	*ADR / RID* UN Number: 3082 Class: 9 Packing group: III ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Metalin 700).
Marine Transport:	*IMDG* UN Number: 3082 Class: 9 Packing group: III ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Metalin 700).
Air Transport:	*IATA*

UN Number: 3082 Class: 9 Packing group: III
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc Metalin 700).


Signal word:	Warning	Warning
Precautionary Statements:	P501:	Dispose of contents/container in accordance with local / regional / national / international regulations.

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.

16. OTHER INFORMATION

Emergency Contact:

KIMLEIGH CHEMICALS SA (PTY) LTD
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Disclaimer:

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