SAFETY DATA SHEET

PASTURE CuZn

Identification of the Material & Supplier

Product Name:	PASTURE Copper/Zinc
Other Names:	Coated Sulphur Copper/Zinc On Triple Super Phosphate (TSP)
Recommended Use:	Fertilizer
Supplier:	Summit Fertilizers 29 Ocean St Kwinana Beach WA 6167 Telephone: 9439 8999

Hazards Identification

Hazards Classification	PASTURE is not classified as hazardous according to NOHSC criteria
Risk Phrase	PASTURE is not classified as a Dangerous Good according to the ADG Code

Composition/Information on Ingredients

Chemical Identity	$Ca(H_2PO_4)_2.H_2O + S$	
Proportion of Ingredients	Phosphate as P	13.9%
	Sulphur as S	7.6%
	Calcium as Ca	16.3%
	Copper as CuO	0.60
	Zinc as ZnO	0.30
CAS Number	7664-93-9	
	7704-34-9	
	1317-38-0	Copper Proportion at 100%
	1314-13-2	Zinc at Proportion at 100%

First Aid Measures

Eye Contact	Immediately flush with fresh water for at least 15 minutes. Hold eyes open while flushing with water. Seek medical attention if irritation persists.
Skin Contact	Immediately remove contaminated clothing and shoes. Flush skin with fresh water for at least 15 minutes. Use soap if available or follow by flushing with soap and water. Do not reuse contaminated clothing without laundering. Seek medical attention if irritation persists.
Inhalation	Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, administer artificial respiration. Seek medical attention immediately.
Ingestion	If victim is conscious and alert, give plenty of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek medical attention immediately.

Fire Fighting Measures

Flammability	Product is non-flammable and does not support combustion.
Suitable Extinguishing Media	Small fires: water spray, foam, dry chemical or CO_2 Large fires: water spray, fog or foam
Hazards from Combustion Products	May evolve toxic gases (phosphorous/sulphur oxides) when heated to decomposition. Wear self-contained breathing apparatus with full protective clothing.
Hazchem Code	None allocated.

Accidental Release Measures

Emergency Procedures	Isolate the area and deny entry to nonessential personnel. Emergency responders and/or clean up personnel should wear appropriate protective clothing and equipment.
Methods and Materials for Containment & Cleanup	Prevent from entering drains or waterways. Collect material promptly. Minimise dust generation during clean-up operation.

Handling & Storage

Precautions for Safe Handling	Avoid dust in the eyes and skin contact. Maintain proper hygiene standards by washing thoroughly after handling product.
Conditions for Safe Storage	Store in a cool, dry, well ventilated location. Prevent product from getting wet as it will cause caking and handling problems.
Storage Incompatibilities	Oxidizing agents, acids and foodstuffs.

Exposure Controls/Personal Protection

National Exposure Controls	No specific official limit. NOHSC recommended value for inhalable particulate TWA: 10mg/m^3
Engineering Controls	Avoid dusty areas.
Personal Protective Equipment	Wear gloves, long sleeve shirt and long trousers to prevent skin contact. In dusty areas use a P1 (particulate) respirator and wear chemical safety glasses to prevent eye contact.

Physical & Chemical Properties

Appearance	Brown or grey granulated solid material.
Odour	Slight odour.
pH of 10% Solution	3
Vapour Pressure	Not applicable
Boiling Point	Not applicable
Melting Point	Not applicable
Solubility	85% in water at 20°C
Specific Gravity	
Bulk Density	1.15t/m^3

Stability & Reactivity

Stability	Stable under normal temperatures and pressures
Reactivity	Hazardous polymerization is not expected to occur.
Incompatible Materials	Incompatible with oxidizing agents (eg peroxides) and acids (eg hydrochloric acid). Avoid exposure to extreme temperatures
Decomposition Products	PO_x , SO_x

Toxicological Information

Health Effects	Low toxicity by oral or dermal exposure as defined by OSHA. Inhalation of dust may cause irritation to the nose and upper respiratory tract. Prolonged skin contact may cause some irritation, including redness and itching. Eye contact may cause irritation, redness and pain. Ingestion of large amounts may give rise to gastro-intestinal irritation with symptoms such as nausea, vomiting, diarrhea.
Toxicity Data	TSP: LD50 (oral): 5,000-6,000mg/kg (sheep) Sulphur: LC50 (inhalation): 1,660 mg/m3 (mammal)

Ecological Information

Eco toxicity	TSP Coated with S, Cu, Zn Aquatic: Copper Toxicity to aquatic life. Fish 96 hour LC_{50} : 25 mg/L Daphnia 50 hour EC_{50} : 0.4 mg/L Algae, OECD Guidelines 201 (green algae, Selenastrum) No toxicity at up to 87.6 mg/L; stimulation observed at 42.6 mg/L and higher. Non-toxic to aquatic organisms as defined by USEPA
Mobility	May leach into groundwater if released to soil. Will not evaporate readily.
Persistence & Degradability	Phosphates are converted to calcium or iron/aluminium phosphates or are incorporated into the organic soil matter. Sulphur is the elemental form which is not soluble but will degrade slowly by bacterial action in the soil. Copper/Zinc: No Information Available
Bio accumulative Potential	Unknown

Disposal Considerations

Disposal Methods & Containers	Dispose of on a farm, or authorized waste facility in accordance with statutory requirements. May be broadcast on farm as fertilizer using proper agriculture and soil management.

Transport Information

UN Number	None allocated
UN Proper Shipping Name	None allocated
Class & Subsidiary Risk	None allocated
Packing Group	None allocated
Hazchem Code	None allocated

Regulatory Information

Australian Regulatory Information	A poison schedule number for Copper Oxide (S6) criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

Other Information

Key/Legend

NOHSC	National Occupational Health and Safety Commission
USEPA	United States Environmental Protection Authority
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
ACGIH	American Conference of Government Industrial Hygienists
OECD	Organisation for Economic Cooperation and Development
ES-TWA	Exposure Standard – Time weighted average
ES-STEL	Exposure Standard – Short term exposure level
ES-Peak	Exposure Standard – Peak level
LDLo	The lowest dose in an animal study in which lethality occurred.
LD50	Lethal dose 50. The single dose of a substance that causes death of 50% of an animal population from exposure other than inhalation
t/m^3	Tonnes per cubic metre
mg/m^3	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Hydrogen ion concentration on a scale of 0-14

Disclaimer

The information contained in this SDS is offered in good faith as accurate but does not purport to be all-inclusive. Health and safety precautions in this SDS may not be adequate for all individuals and/or situations. It is the user's responsibility to determine the suitability of any material for a specific purpose, adopt such precautions as may be necessary and comply with all applicable laws and regulations.
Summit Fertilizers reserves the right to make changes to SDS data without notice.