

# SAFETY DATA SHEET

## CAMPBELLS SOLU-ZINC

Date of Issue: December 2016

### 1. IDENTIFICATION

**Product Identifier:** CAMPBELLS SOLU-ZINC

**Other Means of Identification:** Zinc sulphate heptahydrate

**Recommended Use of the Chemical and Restrictions on Use:** Fertiliser

**Details of Manufacturer or Importer:** Campbells Fertilisers Australasia  
18 Raymond Road, Laverton North, Victoria, 3026  
Phone: (03) 9931 2211  
Fax: (03) 9931 2201  
[www.campbellsfert.com.au](http://www.campbellsfert.com.au)

**Emergency Telephone Number:** (03) 9931 2211 (business hours only 8.30 am to 5.00 pm)  
0418 350 726 (after business hours)  
Poisons Information Centre 131126

### 2. HAZARD(S) IDENTIFICATION



Pictograms: Exclamation Mark, Corrosion, Environment

**GHS Hazard Class and Category:**

Acute Toxicity Oral – category 4: “Warning”

Hazard statement: H302 Harmful if swallowed

Eye Damage/Irritation – category 1: “Danger”

Hazard statement: H318 Causes serious eye damage

Hazardous to the Aquatic Environment (Long-Term Hazard) – category 1: “Warning”

Hazard statement: H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements:

**Prevention**

P264 Wash hands thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P273 Avoid release to the environment

P280 Wear eye protection/face protection

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### Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTRE/doctor

P330 Rinse mouth

P391 Collect spillage

### Storage

No relevant statements

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national regulations.

### ADG

#### Classification:

Based on available information, not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition

### SUSMP

#### Classification:

Schedule 6

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component:	CAS Number:	Proportion (%):
Zinc sulphate heptahydrate	7446-20-0	100

## 4. FIRST AID MEASURES

### Description of Necessary First Aid Measures:

**Inhalation:** Remove casualty to fresh air. Apply artificial respiration if not breathing.

**Skin Contact:** Take off immediately all contaminated clothing and flush skin and hair with running water.

**Eye Contact:** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor or for at least 15 minutes.

**Ingestion:** Contact a Poisons Information Centre 13 11 26 (Australia wide) or a doctor (at once). If swallowed, do not induce vomiting.

**First Aid Facilities:** Ensure washing facilities, including an eyewash, are available and maintained.

### Symptoms caused by Exposure:

**Inhalation:** May cause irritation of the nose and throat. Coughing, dizziness and headache.

**Skin:** May cause irritation to the skin. Redness, pain and rash.

**Eye:** May cause irritation, lacrimation, pain, redness and blurring or dimness of vision.

**Ingestion:** May cause gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea.

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### Medical Attention and Special Treatment:

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Equipment:</b>	Use an extinguishing agent suitable for the surrounding fire. If water used in fire fighting cannot all be contained on site, block drains with sandbags, waterproof tarpaulins or earth to prevent run-off from site. Zinc sulphate is potentially toxic to marine and freshwater organisms. Dispose of contaminated water in accordance with regulatory requirements.
<b>Specific Hazards arising from the Chemical:</b>	Non flammable. May evolve toxic gases (zinc/sulphur oxides) when heated to decomposition.
<b>Special Protective Equipment and Precautions for Fire Fighters:</b>	Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including self contained breathing apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions, Protective Equipment and Emergency Procedures:</b>	Wear personal protective equipment (PPE) as detailed in section 8. Clear area of all unprotected personnel. Contact emergency services where appropriate.
<b>Environmental Precautions:</b>	Prevent product from entering drains and waterways.

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### Methods and Materials for Containment and Cleaning Up:

Fertilizers absorb moisture. If the spill has occurred in an open area and cannot be immediately retrieved, cover it with a waterproof tarpaulin, weighed down to prevent it being blown off by the wind. If necessary, construct an earthen bund around the site to prevent stormwater moving towards the spill, or contaminated stormwater draining from the site. Sandbags and waterproof tarpaulins may also be suitable for blocking drains and preventing run-off. Prevent loss to bores, wells, sewers, stormwater drains and watercourses. Zinc sulphate is classified as an Environmentally Hazardous Substance. It is potentially toxic to marine or freshwater organisms in aquatic environments. Initiate clean up action immediately to recover spilt fertilizer. Avoid generating and inhaling dust. Refer to section 8 for details on protective equipment. Fertilizer that has not been degraded or contaminated can be used as intended. That which has should be placed in separate containers (bags) for disposal. See section 13. Sweep up residual fertilizer from sealed surfaces. In earthen areas, scrape up remaining fertilizer and soil from the affected area. The extent of the recovery will depend on an assessment of the area, its use and proximity to waterways and environmentally sensitive ecosystems. In agricultural fields, spread residual fertilizer out over as wide an area as possible. This product is used in the preparation of liquid fertilizers, e.g. for use as a foliar spray. In the event of a spill after mixing in water, liquid that is recovered from bunds can be used as intended. Filtration may be necessary to avoid blocking nozzles. Residual liquid can be absorbed by sand or similar material, collected and placed in sealable containers for disposal, e.g. spreading as a dry fertilizer. Exercise caution as the spill site may be slippery.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling:

Before use, read the product label, including sections on 'Safety Directions' and 'Care of Equipment'. Use safe work practices. Avoid eye or skin contact and dust inhalation. Observe good personal hygiene, including washing hands before eating. This product is used in the preparation of fertilizer solutions, e.g. for use in foliar sprays. Bunding the mixing and liquid storage areas can prevent loss to watercourses.

### Conditions for Safe Storage, including any Incompatibilities:

Fertilizers should be stored in a cool, dry, covered and well-ventilated area. Do not allow to get wet. Ensure the store is above known flood heights and protected against flooding, and away from watercourses and open stormwater channels. Packaged fertilizer should be stored in such a manner that in the event of a spill it cannot escape from the compound. Store away from farm chemicals, e.g. insecticides, fungicides and herbicides, and foodstuffs. Bagged fertilizers should be stored under cover and out of direct sunlight (which degrades woven polypropylene packs). If stored in the open, do so for short periods only, and cover the bags with a tarpaulin. Avoid high stacking as this promotes caking. The Pallet Capacity rating (design weight) must not be exceeded on the bottom tier.

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### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>Exposure Standards:</b>	No exposure standards have been entered for this product
<b>Biological Monitoring:</b>	No biological limit values have been entered for this product
<b>Control Banding:</b>	Not available
<b>Engineering Controls:</b>	Prepare fertilizer solutions in well-ventilated areas. Avoid inhaling dust, splash from fertilizer solutions and exposure to spray mist.
<b>Individual Protection Measures e.g. Personal Protective Equipment (PPE):</b>	<p>The selection of Personal Protective Equipment (PPE) should be based on a Risk Assessment of the tasks being performed and the likelihood of exposure to the undiluted powder before mixing and fertilizer solutions in which it has been used. Normal work clothing may suffice when preparing fertilizer solutions, provided contact with the product is limited, the mixing is done under well ventilated conditions, and occupational exposure limits are not exceeded.</p> <p>Wash dust and solution from hands and exposed skin. In risk situations, locate an eyewash station nearby. Remove contaminated clothing, and wash it and other protective equipment before storage or reuse. Ensure all PPE conforms to the relevant Australian Standards. Read the labels on the PPE.</p> <p><i>Respiratory Protection:</i> Wear a dust mask where exposure to dust is light. Where the dust nuisance is high and ventilation is inadequate, or mist inhalation is possible, use a properly fitted particulate filter respirator, either full face-piece or half mask plus goggles, that meets Australian Standards AS/NZS 1715 and AS/NZS 1716 "Selection, use and maintenance of respiratory protective devices".</p> <p><i>Skin Protection:</i> Where skin contact may occur and for individuals with sensitive skin, wear ankle length and long sleeved clothing or overalls. Wear a plastic or rubber apron, and rubber boots, if splash from fertilizer solutions is possible. Cotton gloves, which can be washed or disposed of if heavily soiled, will suffice under most circumstances when handling bagged product. Use impervious PVC or rubber gloves in high risk situations, and where splash from fertilizer solutions is possible.</p> <p><i>Eye Protection:</i> Wear safety glasses with side shields where eye contact with the solid product may occur before or while mixing in water. Wear splash-proof goggles if exposure to fertilizer solution is possible.</p> <p><i>Thermal Hazards:</i> None known.</p>

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Fine white crystalline powder
<b>Odour:</b>	Mild odour
<b>Vapour Pressure:</b>	Non volatile

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<b>Specific Gravity:</b>	1.96
<b>Vapour Density:</b>	Not available
<b>Boiling Point:</b>	Not available
<b>Melting Point:</b>	280°C
<b>Solubility (in water):</b>	960 g/L at 20°C
<b>pH:</b>	5.2 (10% solution)
<b>Flash Point:</b>	Not relevant
<b>Flammability (explosive) Limits:</b>	Non flammable
<b>Auto-Ignition Temperature:</b>	Not available
<b>Octanol/Water Partition Coefficient:</b>	Not available
<b>Thermal decomposition:</b>	Not available
<b>Bulk density:</b>	900-1000 kg/m <sup>3</sup>

### 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Carefully review all information in the remainder of this section.
<b>Chemical Stability:</b>	Product is stable under normal conditions of storage.
<b>Possibility of Hazardous Reactions:</b>	Polymerization is not expected to occur.
<b>Conditions to Avoid:</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Incompatible Materials:</b>	Incompatible with lead, calcium and strontium salts, borax, alkali carbonates and hydroxides, silver protein, and tannins. Compatibility with other fertilizers: zinc sulphate is compatible in aqueous solution with urea, UAN and potassium fertilizers. It is incompatible in solution with most phosphorus, calcium and boron fertilizers.
<b>Hazardous Decomposition Products:</b>	May evolve toxic gases (zinc/sulphur oxides) when heated to decomposition.

### 11. TOXICOLOGICAL INFORMATION

**Toxicological Information of the Mixture:** May be harmful – irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and inhalation. Over exposure may result in irritation.

**Acute Toxicity:** *Zinc sulphate heptahydrate*  
LD50 Oral = 245 mg/kg mouse

**Skin Corrosion/Irritation:** No data available

**Serious Eye:** No data available

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<b>Damage/Irritation:</b>	
<b>Respiratory or Skin Sensitisation:</b>	No data available
<b>Germ Cell Mutagenicity:</b>	No data available
<b>Carcinogenicity:</b>	No data available
<b>Reproductive Toxicity:</b>	No data available
<b>Specific Target Organ Toxicity (STOT) - Single Exposure:</b>	No data available
<b>Specific Target Organ Toxicity (STOT) - Repeated Exposure:</b>	No data available
<b>Aspiration Hazard:</b>	No data available

### Likely Routes Of Exposure:

<b>Inhalation:</b>	Low to moderate irritant. Over exposure may cause irritation of the nose and throat. Coughing, dizziness and headache.
<b>Skin:</b>	Irritant. May cause irritation, redness, pain and rash.
<b>Eye:</b>	Irritant. May cause irritation, lacrimation, pain, redness and blurring or dimness of vision.
<b>Ingestion:</b>	Harmful. May cause gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity:</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
<b>Persistence and Degradability:</b>	No information provided
<b>Bioaccumulative Potential:</b>	No information provided
<b>Mobility in Soil:</b>	No information provided
<b>Other Adverse Effects:</b>	Zinc sulphate is classified as an Environmentally Hazardous Substance. It is potentially toxic to marine or freshwater organisms in aquatic environments. Avoid contamination of waterways.

## 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal:</b>	Ideally the fertilizer should be used for its intended purpose, i.e. preparation of fertilizer solutions. Beneficial reuse is the preferred disposal option. If contaminated with inert materials, adequate filtration
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will be necessary to prevent blockages of filters and nozzles. If contaminated with less soluble fertilizers or fertilizers that form insoluble reaction products with this fertilizer in solution, alternative application methods may need to be sought, such as applying the fertilizer dry to the soil by hand. If contaminated with other materials, e.g. fuel, oil or chemicals, the fertilizer waste must be disposed of in accordance with relevant local/national legislation. Contact the Waste Management Authority for advice.

**Container Disposal:** Dispose of in accordance with relevant local/national legislation.

### 14. TRANSPORT INFORMATION

**Classification:** Based on available information, not classified as Dangerous Goods for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail, 7<sup>th</sup> Edition.

**UN Number:** Not allocated

**Proper Shipping Name or Technical Name:** Not allocated

**Transport Hazard Class:** Not allocated

**Packing Group:** Not allocated

**Environmental Hazards for Transport Purposes:** No information provided

**Special Precautions for User:** Not allocated

**HAZCHEM Code:** Not allocated

### 15. REGULATORY INFORMATION

**SUSMP:** S6

**APVMA:** Exempt from registration

**State Departments of Agriculture / Primary Industries:** Registration not required

**Australian Inventory of Chemical Substances (AICS):** All components listed

### 16. OTHER INFORMATION



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**Edition:** Initial edition  
**Revision Due:** December 2021  
**Reason for Revision:** Initial version  
**Preparation Information:** Prepared by Campbells Fertilisers Australasia  
**Data Sources:** Supplier SDS

### Glossary:

**APVMA** Australian Pesticides and Veterinary Medicines Authority  
**CAS** Chemical Abstract Services number, used to uniquely identify chemical compounds  
**PPE** Personal protective equipment  
**SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons

This SDS summarises our best knowledge of the health and safety hazard information available for this product and how to safely handle and use it. Since the use of this information and the conditions of the use of this product are not under the control of Campbell's Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF SDS