



# MATERIAL SAFETY DATA SHEET

## Solu-Sam

Date of Issue: January 01, 2011

### 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

**Product Name:** Solu-Sam

**Recommended Use:** Fertiliser

**Supplier:** Campbells Fertilisers Australasia

**Address:** 18 Raymond Road, Laverton North, Victoria, 3026

**Telephone:** (03) 9931 2211

**Facsimile:** (03) 9931 2201

**Website:** [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)

### 2. HAZARDS IDENTIFICATION

#### NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD

**Hazard Classification:** Not classified as a hazardous substance according to the criteria of NOHSC

**Risk Phrases:** None allocated

**Safety Phrases:** None allocated

**ADG Classification:** Not classified as a Dangerous Good according to the Australian Dangerous Goods Code

**SUSDP Classification:** Not scheduled

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### *Classification and Type:*

Material:	CAS Number:	Proportion (%w/w):
Ammonium Sulfate	7783-20-2	100%

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### 4. FIRST AID MEASURES

#### First Aid Actions

- Inhalation:** Fresh air
- Skin Contact:** Wash off with plenty of water. Remove contaminated clothing.
- Eye Contact:** Rinse out with plenty of water with the eyelid held wide open.
- Ingestion:** Immediately make victim drink plenty of water. Call in physician.

### 5. FIRE FIGHTING MEASURES

- Type of Hazard:** Not considered to be fire hazard. Flammable ammonia gas may be released in fire.
- HAZCHEM Code:** None allocated
- Extinguishing Media & Methods:** Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.
- Hazards from Combustion Products:** May emit ammonia, oxides of sulphur, oxides of nitrogen, oxides of carbon.
- Recommended Protective Clothing:** In event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

### 6. ACCIDENTAL RELEASE MEASURES

- Containment and Clean Up:** Ventilate area of leak or spill.
- Personal Protection:** Wear appropriate protective equipment as specified in Section 8.
- Special Requirements:** Spills: Pick up and place in suitable container for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

### 7. HANDLING AND STORAGE

- Handling:** Wear appropriate PPE as detailed in Section 8.  
Do not handle until all safety precautions have been read and understood. Avoid breathing dust or spray. Do not eat, drink or smoke while using this product.
- Storage:** Keep in a tightly closed container, stored in a cool, dry, ventilated area. Keep out of reach of children.

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Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids)

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Standards:</b>	No airborne exposure limit has been established.
<b>Engineering Controls:</b>	<p><i>Ventilation System:</i> A system of local and/or general exhaust is recommended to keep employee exposure below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contamination as its source, preventing dispersion of it into the general work area.</p>
<b>Personal Protective Equipment:</b>	<p>For conditions for use where exposure to dust or mist is apparent and engineering controls if oil particles (eg lubricants, cutting fluids, glycerine, etc) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive- pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. <i>Skin Protection:</i> Wear imperious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. <i>Eye Protection:</i> Use chemical safety goggles and/or a full face shield where dust or splashing of solutions is possible. Maintain eye wash fountain and quick drench facilities in work area.</p>

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	White Crystals
<b>Odour:</b>	Odourless
<b>Specific Gravity:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Freezing/Melting Point:</b>	Not applicable
<b>Solubility:</b>	754 g/L
<b>pH:</b>	~ Below 7
<b>Flashpoint:</b>	Not flammable

### 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under ordinary conditions of use and storage. Maintain at temperatures below 513°C
<b>Hazardous Polymerisation:</b>	Will not occur

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<b>Conditions to Avoid:</b>	Heat, incompatibles
<b>Incompatible Materials:</b>	Sodium hypochlorite, potassium plus ammonium nitrate, potassium chlorate, potassium nitrite, and sodium-potassium powder plus ammonium nitrate, and other strong oxidizers. May explode if mixed with oxidiser, such as potassium nitrate, potassium nitrite, and potassium chloride.
<b>Hazardous Decomposition Products:</b>	May emit ammonia, oxides of sulphur, oxides of nitrogen, oxides of carbon.

### 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity Data:</b>	LD <sub>50</sub> (oral, rat): 2840 mg/kg Eye irritation test (rabbit): no irritation Skin irritation test (rabbit): no irritation
<b>Subacute to Chronic Toxicity:</b>	<i>Bacterial Mutagenicity:</i> Ames Test: Negative
<b>Further Toxicological Information:</b>	The following applies to ammonium salts in general: After swallowing: local irritation symptoms, nausea, vomiting, diarrhoea Systemic effect (after the uptake of very large quantities): drop in blood pressure, collapse, CNS disorders, spasms, narcotic condition, respiratory paralysis, haemolysis.
<b>Further Data:</b>	The product should be handled with the care usual when dealing with chemicals.

### 12. ECOLOGICAL INFORMATION

<b>General:</b>	No ecological problems are to be expected when the product is handled and used with due care and attention.
<b>Biologic Degradation:</b>	Methods for the determination of biodegradability are not applicable to inorganic substances.
<b>Behaviour in Environmental Compartments:</b>	Distribution: log p(o/w): -5.1 No bioaccumulation is to be expected (log P(o/w) ,1)
<b>Ecotoxic Effects:</b>	<i>Biological Effects:</i> Fertilizing effect possible Fish Toxicity: Br. Rerio LC <sub>50</sub> : 420 mg/L/96h Daphnia Toxicity: <i>Daphnia magna</i> EC <sub>50</sub> : 129 mg/L/48h
<b>Further Ecological Data:</b>	The following applies to ammonium ions in general: <i>Biological Effects:</i> Fish: Toxic as from 0.3 mg/L Nourishment for Fish: Toxic as from 0.3 mg/L

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The following applies to sulphate in general:

*Biological Effects:*

Fish: Toxic as from 7 g/L

Bacteria: Toxic as from 2.5 g/L

### 13. DISPOSAL CONSIDERATIONS

**Product Disposal:** Recycle excess product when possible. Dispose of in an appropriately permitted waste landfill, or disposed of by other methods in accordance with local, state, and federal regulations.

### 14. TRANSPORT INFORMATION

**UN Number:** None allocated  
**Proper Shipping Name:** None allocated  
**DG Class and Subsidiary Risk:** None allocated  
**Packing Group:** None allocated  
**HAZCHEM Code:** None allocated  
**Special Precautions:** None allocated

### 15. REGULATORY INFORMATION

**Regulatory Status:** Fertilizers do not require registration in Australia

### 16. OTHER INFORMATION

**Edition:** Initial version  
**Revision Due:** 12 February 2015  
**Reason for Revision:** -  
**Additional Information:** Directions for use are found on the product label.

#### Glossary:

**CAS** Chemical Abstract Services Number, used to uniquely identify chemical compounds  
**LD<sub>50</sub>** Lethal dose to kill 50% of test animals or organisms  
**LC<sub>50</sub>/EC<sub>50</sub>** Lethal concentration fatal to 50% of test animals or organisms  
**NOHSC** National Occupational Health and Safety Commission  
**PPE** Personal Protective Equipment  
**SUSDP** Standard for the Scheduling of Drugs and Poisons



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This MSDS 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 Campbells Fertilisers, it is the user's responsibility to determine conditions of safe use of the product.

END OF MSDS