

## SAFETY DATA SHEET AGRISILICA LIQUID SOLUTION

### 1. IDENTIFICATION

<b>PRODUCT NAME</b>	Agrisilica Liquid Solution
<b>OTHER NAMES</b>	Silicic acid, potassium silicate solution
<b>PRODUCT CODES</b>	AP-L
<b>RECOMMENDED USES</b>	Fertiliser

#### DETAILS OF MANUFACTURER

<b>ORGANISATION</b>	Agripower Australia Limited
<b>LOCATION</b>	Level 13, 20 Bridge Street Sydney NSW 2000 Australia
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<b>WEBSITE</b>	<a href="http://www.agripower.com.au">www.agripower.com.au</a>
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<b>EMERGENCY TELEPHONE</b>	+61 2 9251 8884

### 2. HAZARD IDENTIFICATION

#### GHS Classification

Skin Corrosion 1C  
STOT SE – Category 3 Respiratory Tract Irritation

#### GHS Label Elements



**SIGNAL WORD** **DANGER**

#### HAZARD STATEMENTS

Causes severe skin burns and eye damage  
May cause respiratory irritation

#### PRECAUTIONARY STATEMENTS

##### Prevention

Keep out of reach of children  
Read label before use  
Do not breathe dust, fume, gas, mist, vapours or spray  
Wash hands, face and all exposed skin thoroughly after handling  
Wear protective clothing, gloves, eye/face protection and a suitable respirator

### Response

If medical advice is needed, have product container or label at hand

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF ON SKIN: Remove/Take off all contaminated clothing immediately. Rinse skin with water/shower

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

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

Call a POISON CENTRE or doctor/physician if you feel unwell.

### Storage

Store locked up, in a well-ventilated place. Keep container tightly closed

### Disposal

Dispose of contents/container in accordance with local, regional, national and international regulations

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT	CAS NUMBER	PROPORTION
Silicic acid	1312-76-1	30 – 60%
Water	7732-18-5	30 – 60%

## 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or the Poisons Information Centre (Phone Australia 13 13 26).

### DESCRIPTION OF FIRST AID MEASURES

<b>EYE CONTACT</b>	Flush the contaminated eye(s) with lukewarm, gently flowing water until advised to stop by a doctor or at least 15 minutes. If irritation persists, seek medical advice.
<b>SKIN CONTACT</b>	If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation persists, seek medical advice.
<b>INGESTION</b>	Immediately rinse mouth with water until product is thoroughly removed. Do NOT induce vomiting, if vomiting occurs give water to drink to further dilute the product. Seek medical attention.
<b>INHALATION</b>	Not expected to be an inhalation hazard under normal use. If irritation persists, seek medical advice.
<b>TREATMENT</b>	Treat symptomatically as for strong alkalis based on individual reactions of patient and judgement of doctor.

## 5. FIRE FIGHTING MEASURES

**Hazchem Code:** •2X

**EXTINGUISHING MEDIA** If material is involved in a fire, use water, alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

**SPECIFIC HAZARDS** Non-combustible

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS** Chemical goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS** Personal protective equipment as per section 8 is recommended for all personnel involved with the clean-up, and within a poorly ventilated environment.

**ENVIRONMENTAL PRECAUTIONS** Liquid is alkaline and may increase pH, which may cause harm to aquatic life. Avoid release into water systems and sewers.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP** For small spills, prevent runoff and isolate material. Use sand or earth to absorb spilled material, shovel dried waste into suitable container and dispose in accordance to Section 13.

For large spills, isolate hazard area and if possible stop further spills. Liquid may be collected by a vacuum truck, or absorbed with sand or earth. If containment is impossible, neutralise contaminated area and flush with large quantities of water. Dispose of material in accordance with Section 13.

## 7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING** Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Take appropriate precautions when handling bulk product that is transported/shipped whilst hot as it can cause thermal burns. Wear appropriate personal protective equipment as recommended in Section 8. Keep containers closed. Promptly clean residue from closures with cloth.

**CONDITIONS FOR SAFE STORAGE** Store in accordance with all local regulations and codes of practice.  
Ensure containers are labelled and kept closed when not in. Storage temperature 0-70°C. Loading temperature 10-50°C.  
Mild steel is the most suitable material of construction for drums, tanks, valves, pipe-work, etc. Concrete storage tanks can be used but must be strong enough to hold the weight of Potassium Silicate solution to be stored and thick enough to prevent seepage of water.

**INCOMPATIBILITIES** Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers. Store away from acids and foodstuffs. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### CONTROL PARAMETERS EXPOSURE LIMITS

No exposure standards have been established for the ingredients in this product as published by Safe Work Australia Workplace Exposure Standards.  
A peak limitation limit of 2mg/m<sup>3</sup> (TWA) is recommended by analogy with potassium hydroxide. *Peak limitation* means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.  
This standard is the manufacturers recommended limit for good practice.  
All atmospheric contamination should be minimized; avoid creating mists or vapours.

### ENGINEERING CONTROLS

Use in well ventilated area. Avoid generating and inhaling mists.  
Ensure exposure is managed within recommended exposure limits.

### ENVIRONMENTAL CONTROLS

Ensure material is used in an appropriately bunded area to prevent release into soil, water systems, and sewers.

### PERSONAL PROTECTIVE EQUIPMENT

#### EYE

Wear glasses with side shields. If contact with material is likely the use of chemical resistant goggles in combination with a full face shield is recommended.  
Ensure a suitable eyewash station is within the immediate vicinity.

**SKIN** Wear chemical resistant overalls, a full apron or similar protective clothing. Wear appropriate chemical resistant protective boots.

**RESPIRATORY** If material is likely to be vaporized the use an approved respirator is necessary. Consult a respiratory equipment supplier to aid selection of the appropriate type.

Wash contaminated clothing and protective equipment before storing and re-using.

The use of barrier cream is recommended.

Refer to Section 15 in relation to the Australian Standards for PPE

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear, golden liquid
<b>Odour</b>	Odourless
<b>pH (20°C, 1:5 water)</b>	11 to 12
<b>Melting point</b>	0°C
<b>Boiling point</b>	105°C
<b>Evaporation rate</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	1.2
<b>Solubility</b>	Soluble in water.
<b>Octanol/water coefficient</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>CHEMICAL STABILITY</b>	Stable in sealed containers.
<b>INCOMPATIBLE MATERIALS</b>	Potassium silicate solutions are strongly alkaline and are not compatible with aluminium, copper, brass, bronze, zinc, tin and lead. Can etch glass if not promptly removed.
<b>CONDITIONS TO AVOID</b>	Prolonged storage above 50°C or below 10°C.
<b>INCOMPATIBLE MATERIALS</b>	Will react exothermically with acids.
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Irritating potassium silicate mist formation may occur with boiling.
<b>HAZARDOUS REACTIONS</b>	Flammable hydrogen gas will form on reaction with aluminium, copper, zinc etc.

Gels and generates heat when mixed with acid.  
May react with ammonium salts resulting in evolution of ammonia gas.

## 11. TOXICOLOGICAL INFORMATION

<b>ACUTE TOXICITY</b>	No data available.
<b>SKIN</b>	Causes severe skin burns
<b>CORROSION/IRRITATION</b>	
<b>EYE DAMAGE/IRRITATION</b>	Causes severe eye damage
<b>RESPIRATORY</b>	May cause respiratory irritation
<b>SENSITISATION</b>	Classified as a STOT (single exposure) Category 3
<b>GERM CELL MUTAGENICITY</b>	No data available.
<b>REPRODUCTIVE TOXICITY</b>	No data available.
<b>CHRONIC EFFECTS</b>	Prolonged or repeated exposure to this material's dust, or any nuisance dust, may result in irritation to the eyes and respiratory tract. As this product may contain traces of respirable crystalline silica, respiratory equipment (section 8) is required for exposure over the action limit of 25 µg/m <sup>3</sup> (OSHA).

## 12. ECOLOGICAL INFORMATION

<b>ECOTOXICITY</b>	No information available.
<b>PERSISTENCE AND DEGRABILITY</b>	No information available.
<b>BIOACCUMULATIVE POTENTIAL</b>	No information available.
<b>MOBILITY IN SOIL</b>	No information available.
<b>OTHER ADVERSE EFFECTS</b>	No information available.

## 13. DISPOSAL CONSIDERATIONS

<b>DISPOSAL CONTAINERS AND METHODS</b>	Waste material to be disposed of at an approved municipal landfill or land application site. No special containers are required.
<b>PACKAGING DISPOSAL</b>	Dispose of in accordance with applicable local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

<b>ROAD &amp; RAIL</b>	Classified as a Dangerous Good according to ADG
<b>SEA</b>	Classified as a Dangerous Good according to the IMDG Code

