

**Safety Data Sheet**  
according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**1 Identification**

- **Product identifier**
- **Trade name:** *CGS SHOTGUN*
- **Article number:** *DK073*
- **Relevant identified uses of the substance or mixture and uses advised against**  
*For use in the agricultural sector.*
- **Technical function** *Liquid fertilizer*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Company: Cotton Growers Services Pty Ltd*  
*Address: 52 Boolcarrol Road*  
*Wee Waa NSW 2388*  
*Telephone Number: +61 2 6790 3200*
- **Emergency telephone number:**  
*ISS First Response*  
*03 8769 3688*

**2 Hazard(s) Identification**

- **Classification of the substance or mixture**



*Repr. 1B                      H360 May damage fertility or the unborn child.*



*Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.*



*Acute Tox. 4                      H332 Harmful if inhaled.*

*Skin Irrit. 2                      H315 Causes skin irritation.*

*Eye Irrit. 2A                      H319 Causes serious eye irritation.*

*Acute Tox. 5                      H303 May be harmful if swallowed.*

*Aquatic Acute 3                      H402 Harmful to aquatic life.*

· **Additional information:** *If in eye and treatment is delayed, it will cause damage to the eye*

- **Label elements**

- **GHS label elements**

*The substance is classified and labelled according to Safe Work Australia GHS Hazardous Chemical Information List*

*The product is classified and labelled according to the Globally Harmonised System (GHS).*

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**Trade name: CGS SHOTGUN**

(Contd. of page 1)

**Hazard pictograms**

GHS07   GHS08   GHS09

**Signal word** Danger**Hazard-determining components of labelling:**

PHOSPHORIC ACID

Zinc Sulphate Heptahydrate

Boron 20.5

**Hazard statements**

H303 May be harmful if swallowed.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H402 Harmful to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P321 Specific treatment (see on this label).

P405 Store locked up.

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

**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

**Chemical characterisation: Mixtures****Description:** Mixture containing the following components**Dangerous components:**

CAS: 7664-38-2 EINECS: 231-633-2	PHOSPHORIC ACID ----- ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H332	10-25%
CAS: 7446-20-0 EINECS: 231-793-3	Zinc Sulphate Heptahydrate ----- ⚠ Eye Dam. 1, H318 ⚠ Aquatic Chronic 1, H410 ⚠ Acute Tox. 4, H302	2.5-10%
CAS: 10034-96-5 EINECS: 232-089-9	Manganese Sulphate Monohydrate ----- ⚠ STOT RE 2, H373 ⚠ Aquatic Chronic 2, H411	2.5-10%

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**Trade name:**CGS SHOTGUN

(Contd. of page 2)

	Boron 20.5 ⚠ Repr. 1B, H360	≤2.5%
	COPPER SULPHATE PENTAHYDRATE ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410 ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	≤2.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.
- **Other hazards that do not result in classification** None

### 4 First Aid Measures

- **Description of first aid measures**
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing. Flush affected areas with plenty of water and soap.
- **After eye contact:**  
Rinse opened eye under running water for at least 15 minutes. Get medical attention if irritation persists.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:** Treat supportive and symptomatically
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions. Water spray jet, foam. Dry fire-extinguishing substance.
- **Special hazards arising from the substance or mixture**  
If liquid boils dry, salts in fire will produce harmful gasses.  
Metal oxide fumes  
Phosphorus oxides (PxOy)  
Sulphur oxides (SOx)
- **Advice for firefighters** Material not combustible
- **Protective equipment:** Use breathing apparatus with independent air supply (Isolated)

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective gear. Do not inhale the material or its combustion products. Go against the wind (up-wind) and keep out of low areas. Evacuate personnel to safe area.
- **Environmental precautions:**  
Prevent from spreading (e.g. by damming-in or oil barriers).  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water. Should not be released into the environment.
- **Methods and material for containment and cleaning up:**  
Collect the product mechanically (vacuum or pump). Deposit in recipient for recuperation.  
Uncontaminated spilled material may be reused  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

(Contd. on page 4)

# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

Trade name: CGS SHOTGUN

(Contd. of page 3)

- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**  
Wear appropriate PPE (see section 8)  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect from heat.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe the rules usually applicable when handling chemicals.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**  
Keep container tightly sealed in a dry well-ventilated place.  
Protect from heat and direct sunlight.
- **Specific end use(s)** Agricultural

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:**  
Ensure eyewash stations and safety showers are close to the workstation location.
- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

7664-38-2 PHOSPHORIC ACID

WES	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup>
-----	---

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 5)

# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**Trade name: CGS SHOTGUN**

(Contd. of page 4)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellow
<b>Odour:</b>	Slight Pungent
<b>Odour threshold:</b>	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	>100 °C

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:**

**Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

- **Vapour pressure:** Not determined.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:**

Fully miscible.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

**Dynamic:** Not determined.

(Contd. on page 6)

# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

Trade name: CGS SHOTGUN

(Contd. of page 5)

<b>Kinematic:</b>	Not determined.
<b>Solvent content:</b>	
<b>VOC (EC)</b>	0.00 %
<b>Other information</b>	No further relevant information available.

### 10 Stability and Reactivity

- **Reactivity** Stable under normal conditions
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
  - Metal oxide fumes
  - Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>)
  - Sulphur oxides (SO<sub>x</sub>)

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

#### 7664-38-2 PHOSPHORIC ACID

Oral	LD50	1,530 mg/kg (rat)
Dermal	LD50	2,740 mg/kg (rabbit)
Inhalative	LC50 4 h	1.689 mg/l (rabbit)

#### 7446-20-0 Zinc Sulphate Heptahydrate

Oral	LD50	1,260 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

#### 10034-96-5 Manganese Sulphate Monohydrate

Oral	LD50	2,150 mg/kg (rat)
------	------	-------------------

#### COPPER SULPHATE PENTAHYDRATE

Oral	LD50	500 mg/kg (ATE)
------	------	-----------------

#### 10026-24-1 Cobalt sulphate heptahydrate

Oral	LD50	584 mg/kg (mouse)
		582 mg/kg (rat)
		1,800 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
  - The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - Irritant
  - Carcinogenic if inhaled.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - Repr. 1B

-AU-

(Contd. on page 7)

## Safety Data Sheet according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

Trade name: CGS SHOTGUN

(Contd. of page 6)

### 12 Ecological Information

- **Toxicity**

- **Aquatic toxicity:**

**7446-20-0 Zinc Sulphate Heptahydrate**

LC50 24 hours (static)	130 mg/L ( <i>Leptophlebia marginata</i> (Mayfly))
LC50 48 hours (dynamic)	199 mg/L ( <i>Daphnia magna</i> )

**10034-96-5 Manganese Sulphate Monohydrate**

EC50 48 h (static)	40 mg/l ( <i>Daphnia Magna</i> )
LC50 48 hours	31 mg/L ( <i>Lemna minor</i> (common duckweed))

**10026-24-1 Cobalt sulphate heptahydrate**

LC50 48 hours (static)	7.37 mg/L ( <i>Daphnia magna</i> )
LC50 96 hours (static)	2.72 mg/L ( <i>Pimephales promelas</i> (Fathead Minnow))

- **Persistence and degradability**

This product is a fertiliser and will react in the soil as such.

The substance is inorganic; therefore no biodegradation tests are applicable

- **Behaviour in environmental systems:**

- **Bioaccumulative potential**

**7446-20-0 Zinc Sulphate Heptahydrate**

Bioaccumulate	112 (Not Applicable)
---------------	----------------------

- **Mobility in soil**

**7446-20-0 Zinc Sulphate Heptahydrate**

Koc	6.124 (Soil)
-----	--------------

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

Contain material in dyke and pump into container for reuse. If contaminated, absorb on absorption material, put material into bins for disposal.

Disposal according to local regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:** Disposal must be made according to official regulations.

-AU-

(Contd. on page 8)



# Safety Data Sheet

according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

Trade name: CGS SHOTGUN

(Contd. of page 7)

## 14 Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· ADG, IMDG, IATA</li> </ul>	UNI760
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· ADG</li> <li>· IMDG</li> <li>· IATA</li> </ul>	<p>CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID, SOLUTION), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID, SOLUTION, Zinc Sulphate Heptahydrate, Manganese Sulphate Monohydrate, COPPER SULPHATE PENTAHYDRATE), MARINE POLLUTANT CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID, SOLUTION)</p>
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· ADG, IMDG</li> </ul>	<p>8 Corrosive substances.</p>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>8</p>
<ul style="list-style-type: none"> <li>· IATA</li> </ul>	<p>8 Corrosive substances.</p>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>8</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· ADG, IMDG, IATA</li> </ul>	<p>III</p>
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> <li>· Marine pollutant:</li> <li>· Special marking (ADG):</li> </ul>	<p>Product contains environmentally hazardous substances: Zinc Sulphate Heptahydrate Symbol (fish and tree) Symbol (fish and tree)</p>
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> <li>· Stowage Code</li> <li>· ERG No.</li> </ul>	<p>Warning: Corrosive substances. 80 F-A,S-B Acids A SW2 Clear of living quarters. None</p>
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of Marpol and the IBC Code</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· ADG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>	<p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 E</p>

(Contd. on page 9)

-AU



# Safety Data Sheet

## according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**Trade name:** CGS SHOTGUN

(Contd. of page 8)

<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	UN 1760 CORROSIVE LIQUID, N.O.S. (PHOSPHORIC ACID, SOLUTION), 8, III, ENVIRONMENTALLY HAZARDOUS

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Australian Inventory of Chemical Substances**

7664-38-2	PHOSPHORIC ACID
7446-20-0	Zinc Sulphate Heptahydrate
57-13-6	UREA GRANULAR
	Magnesium hydrogen phosphate trihydrate
10034-96-5	Manganese Sulphate Monohydrate
	COPPER SULPHATE PENTAHYDRATE
	IRON SULPHATE HEPTAHYDRATE
6381-92-6	Disodium EDTA dihydrate
	Dextrose monohydrate
1313-30-0	SODIUM PHOSPHOMOLYBDATE
	MONOSODIUM PHOSPHATE
10102-40-6	Sodium Molybdate Dihydrate
7558-79-4	DISODIUM HYDROGEN PHOSPHATE
	FORMIC ACID 85%

- **Standard for the Uniform Scheduling of Medicines and Poisons**

7664-38-2	PHOSPHORIC ACID	S5, S6
	COPPER SULPHATE PENTAHYDRATE	S5, S6
	FORMIC ACID 85%	S5

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.

(Contd. on page 10)

## Safety Data Sheet according to WHS Regulations

Printing date 02.06.2021

Version number 1

Revision: 02.06.2021

**Trade name: CGS SHOTGUN**

(Contd. of page 9)

*H360 May damage fertility or the unborn child.*

*H373 May cause damage to organs through prolonged or repeated exposure.*

*H400 Very toxic to aquatic life.*

*H410 Very toxic to aquatic life with long lasting effects.*

*H411 Toxic to aquatic life with long lasting effects.*

**Abbreviations and acronyms:**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 5: Acute toxicity – Category 5*

*Acute Tox. 4: Acute toxicity – Category 4*

*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*

*Skin Irrit. 2: Skin corrosion/irritation – Category 2*

*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*

*Repr. 1B: Reproductive toxicity – Category 1B*

*STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*

*Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

*Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3*

*Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

*Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*