Spraygro Liquid Fertilizers

ABN 47 007 974 496

Safety Data Sheet

Globally Harmonised System (GHS)

NS 50

Compilation date	2/09/2015
Last revision date	30/03/2026
Valid to	29/03/2031
Version #	4

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name:	**NS 50**
CAS Number:	Not applicable, mixture
Product Code:	NS 50
Formula	Not applicable, mixture
Synonyms	Not available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: **Fertiliser**

1.3 Details of the supplier of the safety data sheet

Company Name:	Spraygro Liquid Fertilizers
Address:	76 Grand Trunkway, Gillman, SA, 5013, AUSTRALIA
Telephone:	+61 8 8447 7266

1.4 Emergency number

Emergency Contacts:	0438 897 977 - Product Chemist
	0407 606 409 - National Sales Manager

SECTION 2: Hazards Identification

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Based on available information, not classified as hazardous according to criteria of Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

Classification of the substance or mixture:

SIGNAL WORD: **NONE**

Hazard Statement(s):

Poisons Schedule: None Allocated

Precautionary Statement(s):

Prevention:

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

Response:

Storage:

Disposal:

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

SECTION 3: Composition/Information on Ingredients

3.1 Components

Components	CAS Number	Proportion	Material Hazard Codes
water		30 to 60%	
urea	57-13-6	30 to 60%	
ammonium thiosulfate	7783-18-8	30 to 60%	
other ingredients, non-hazardous	none assigned	1 to 10%	

SECTION 4: First Aid Measures

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126)

Inhalation:

If product is inhaled:

- Remove from contaminated area.
- Lay patient down, keep warm and rested.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-value mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor, without delay.

If aerosols are inhaled:

- Remove from contaminated area.
- Other measures are generally unnecessary.

Skin Contact:

If skin or hair contact occurs:

- Flush skin and hair with running water.
- Seek medical attention if irritation is evident.

Eye Contact:

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Seek medical attention if irritation is evident.

Ingestion:

If ingestion occurs:

- Ingestion of thiosulfates may release sulfur dioxide (due to reaction with stomach acids) which presents Acute tox category 3 : Inhalation toxic and Skin Corr. 1B: Causes severe burns.

• If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
• Observe the patient carefully.
• Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
• Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
• Seek medical advice.

Signs and Symptoms of Exposure:
This product may liberate a small amount of ammonia which may cause discomfort for some people.

Note to Physician:
Treat symptomatically and supportively

SECTION 5: Fire Fighting Measures

Extinguishing media
• There is no restriction on the type of extinguisher which may be used.
• Use extinguishing media suitable for surrounding area.

Special Hazards arising from the substrate or mixture
• Avoid contamination with reducing agents, i.e. metal hydrides, phosphine's, sulfites which may liberate flammable gases.
• Avoid contamination with acids as large amounts of toxic sulfur dioxide with heat may result.

Advice for firefighters
• Alert Fire Brigade and tell them location and nature of hazard.
• Wear breathing apparatus plus protective gloves in the event of a fire.
• Prevent, by any means available, spillage from entering drains or water courses.
• Use fire fighting procedures suitable for surrounding area.

Fire/Explosion Hazard:
• Non-Combustible
• Decomposition products may produce the following toxic and/or corrosive fumes:
    • sulfur oxides
    • nitrogen oxides
    • carbon monoxide

Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

SECTION 6: Accidental Release Measures

Minor spills
• Clean up spill immediately
• Wear personal protective equipment when cleaning up (see section 8).
• This product contains ammonia which will produce vapours, use breathing apparatus.
• Clean up spill with sand or dirt or other inert material.
• Sweep/shovel for disposal. Comply with procedures laid down by local, state and federal governments.

Major Spill
• Clear area of personnel and move upwind.

• Contact Fire brigade or other hazard agency.

Specific Hazard

• Take all reasonable steps to ensure spills of this product do not come in contact with acids.
• If spills of this product come in contact with an acid, treat as a major spill and act accordingly.

Prevent entry of spills to sewer and public water. Notify authorities if liquid enters sewers or public water.

SECTION 7: Handling and Storage

Precautions for Safe Handling

• Avoid skin and eye contact.
• Avoid breathing vapour.
• Wash hands and other exposed area with mild soap and water before eating, drinking or smoking.

Conditions for safe storage

• Store in a cool, dry, well ventilated place and out of direct sunlight.
• Do not store close to food or food cartons.
• Store away from incompatible materials described in Section 10.
• Keep containers closed when not in use.
• Check regularly for spills.
• Keep out of reach of children and pets.
• Do not transfer to container that does not have a breathable cap.

SECTION 8: Exposure Controls/Personal Protection

Control Parameters: No value assigned for this specific material by the National Occupational Health and Safety Commission. However, Exposure Standard(s) for constituent(s):
Ammonia
TWA - 17mg/m^3
STEL - 24mg/m^3

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work

Appropriate Engineering Controls:
Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Use with local exhaust ventilation or while wearing a mask capable of filtering ammonia gas. Prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

For 1000L IBC containers, ensure a contingency plan is in place in the event of malfunction of the tap.

Personal Protective Equipment

Eye and Face Protection

• Wear googles or glasses while handing this product.

Skin Protection

• Wear chemically resistant gloves.
• Do not wear clothes or shoes that reveal bare skin.

Respiratory protection

• Wear respiratory that is approved for filtering ammonia gas.

SECTION 9: Physical and Chemical Properties

Physical state:	Liquid
Colour:	colourless
Odour:	ammonical
pH (average):	7.7
Freezing point:	< 0^{o}C
Boiling point:	~ 105^{o}C
Flash point:	none
Evaporation rate:	no data
Flammability:	not flammable
Vapour pressure:	same as water
Vapour density:	same as water
Specific Gravity:	1.3 (water = 1)
Solubility:	Completely soluble in water
Partition co-efficient	no data
Auto-ignition temperature	no data
Decomposition temperature	no data
Viscosity	1 to 100 mPa.s (water = 1)

SECTION 10: Stability and Reactivity

Reactivity and Associated Hazards

• May be exothermic in the presence of reducing agents.
• May release ammonia vapour upon exposure to basic (alkaline) chemicals.
• Reacts with acids to form toxic sulfur oxides and colloidal sulfur.
• Reacts with some oxidising agents to form toxic sulfur oxides and colloidal sulfur.

Stability

• May undergo mild container expansion over time without a breathable cap.
• Hazardous polymerisation will not occur.

Conditions to avoid

See Section 7

Incompatible materials

Incompatible with:
• Acidic chemicals
• Reducing agents

Hazardous Decomposition Products

• sulfur oxides
• nitrogen oxides
• carbon monoxide

SECTION 11: Toxicological Information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:
• This liquid is not considered harmful (as classified by EC Directives) because of a lack of evidence. This does not rule out the capability of harm from ingestion.

Eye Contact:
• While the components of this liquid are not considered an eye irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort.

Skin Contact:
• While the components of this liquid are not considered an skin irritant (as classified by EC Directives), direct contact is not recommended as good hygiene practises should be used.

Inhalation:
• The components in this liquid are not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives) and the product is non-volatile.

Chronic:
• Chronic effects adverse to the health are not considered for the components in this liquid (as classified by EC Directives). Exposure by all routes should be minimised as a precaution.

Hazards for individual components*

Components	Acute Toxicity	Irritation
urea	LD50 for rat (oral) = 11500mg/kg	not irritating
ammonium thiosulfate	LD 50 for rat (oral) = 3824 mg/kg	not irritating
other ingredients, non-hazardous	insufficient or no data	insufficient or no data

* additional toxicity data, including sensitisation, genetic toxicity, carcinogenicity can be found in the European Chemical Agency (ECHA) databases.

SECTION 12: Ecological Information

• DO NOT CONTAMINTE WATERWAYS

Ecotoxicity for product: No available data

- Ecotoxicity for individual components*

Components	Acute Aquatic Toxicity
urea	LC50 (96h) Leuciscus >6810 mg/L
ammonium thiosulfate	LC50 (96hr) Lepomis = 510mg/L
other ingredients, non-hazardous	insufficient or no data

* additional toxicity data, including long-term aquatic toxicity, aquatic invertebrates, algae/microorganisms can be found in the European Chemical Agency (ECHA) databases.

Persistence and degradability: No specific data on this product
Bioaccumulative Potential: No specific data on this product
Mobility in Soil: No specific data on this product

SECTION 13: Disposal Considerations

Disposal methods:

• Reuse or recycle clean containers where possible.
• Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor.
Normally suitable for disposal at approved land waste site.

SECTION 14: Transport Considerations

Land Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport (IMDG)
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS

Air Transport (IATA)
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

SECTION 15: Regulatory Information

The components of this product are listed on the Australian Inventory of Chemical Substances (AICS) or are made from other materials (proprietary) that are also listed on the AICS.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport

Based on available information, not classified as hazardous according to criteria of Safe Work Australia; NON-HAZARDOUS

Poison Schedule: None Assigned (SUSMP)

SECTION 16: Other Information

This SDS was prepared using:

• The Globally Harmonized System of Classification and Labelling of Chemicals GHS (7th - 10th Edition) 2017-2023
• European Chemical Agency C&L Inventory
• Preparation of Safety Data Sheets for Hazardous Chemicals (Safe Work Australia 2023)
• Classifying Hazarous Chemicals - National Guide (Safe Work Australia 2018)
• Australian Inventory of Chemical Substances (AICS)
• The Poisons Standard, SUSMP (2022)
• Australian Code for the Transport of Dangerous Goods by Road and Rail. Edition 7.9 (2024)

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material. Since Spraygro Liquid Fertilizers Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

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