

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hi - Sil Plus
Product Type: Liquid fertiliser
Company Name: Hi-Tech Ag Solutions
 24 Shanahan Road (PO Box 5351)
 Davenport WA 6230 Australia
Phone: 08 9725 7322
Emergency Contact: 0499 944 099
Date of Issue: 28th January 2025

2. HAZARDS IDENTIFICATION

Hazard Classification: Hazard classification according to the criteria of GHS Classification
 Non-Dangerous goods classification according to the Australia Dangerous Goods Code.

GHS Classification Eye Damage/Eye irritation – Cat 2A
 Skin Irritation – Cat 2

Label Element



Signal Word Warning

Hazard Statement H303 – May be harmful if swallowed
 H315 – Causes skin irritation
 H319 – Causes serious eye irritation

Precautionary Statement P264 – Wash thoroughly after handling
 P280 – Wear protective gloves/protective clothing/eye protection & face protection.
 P302 + P352- IF ON SKIN, wash with plenty of soap and water
 P305 + P351 + P338 – IF ON EYES, rinse cautiously with water for several minutes. Remove lenses if present and easy to do. Continue rinsing.
 P337 + P313 – If irritation persists get medical attention/advice.

Disposal P501 – Dispose of contents/container in an approved waste disposal plant.

3. INFORMATION ON INGREDIENTS

Chemical	CAS No	Proportion
Potassium Silicate	1312-76-1	20 -50%
Other fertiliser ingredients determined not to be hazardous	N/A	% Balance

4. FIRST AID MEASURES

Inhalation: If inhaled, remove person to fresh air. If symptoms persist seek medical attention.

Ingestion: Do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention. Contact Poison information Centre.

Skin Contact: Remove contaminated clothing. Rinse skin off immediately with plenty water. If irritation persists, seek medical attention.

Eye: Rinse with plenty of clean water for 15 minutes, seek attention, if irritation persists.

First Aid Facilities: Eyewash and normal washroom facilities

Advice to Doctor: Treat symptomatically.

Other Information: For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

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5. FIRE FIGHTING MEASURES

Hazards from Combustion:	Non-combustible material.
Extinguishing media	Compatible with dry chemical water spray, foam, and Carbon dioxide
Specific Hazards:	This product is non-combustible, flammable hydrogen gas maybe produced.
Precautions in a Fire:	Fire fighters should wear Self-Contained Breathing Apparatus & PPE to prevent exposure to vapours or fumes. Dike area to prevent runoff and contamination of water sources. Suitable for most extinguishing media.
Hazchem Code:	Not Regulated

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	Wear appropriate PPE to minimise exposure. Increase ventilation. If possible, contain the spill with sand or vermiculite, store in a suitable container.
Other Information:	Large spills may be reportable to the state and/or local regulatory agencies.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Use only in a well-ventilated area. Keep containers sealed when not in use. Store and transport in sealed containers below 40° C. Remove PPE after handling product.
Conditions for Safe Storage:	Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in original, labelled containers. Keep containers closed when not in use. Ensure that storage conditions comply with applicable local and national regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards:	No exposure value assigned for this specific material
Biological Limit Values:	No biological limits allocated.
Engineering Controls:	Use with good general ventilation.
PPE:	
Eye Protection:	Safety glasses with side shields should be worn.
Hand Protection:	Wear gloves of impervious material
Body Protection	Wear chemical resistant coveralls
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown Viscous Liquid	Boiling Point:	N/A
Solubility in Water:	100%	Melting Point:	N/A
Specific Gravity:	1.25 – 1.39	Vapour Pressure:	N/A
pH Value	11.5 – 12.7	Flash Point:	N/A
Auto-Ignition Temperature:	N/A	Flammability:	Not flammable water-based liquid

Note: Physical data typical values but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity:	Stable liquid with no hazardous decomposition products.
Conditions to Avoid:	Excessive heat. Do not store near heat or flame.
Chemical Stability:	Stable under normal conditions of storage and handling.
Incompatible Materials:	Will react exothermically with acids.
Hazardous decomposition of products	May form hydrogen gas when reacted with Al, Cu, brass, bronze, and Zn and gels and generates heat when reacted with an acid.
Other Information	Strongly alkaline solution and are not compatible to Al, Cu, Brass, bronze & Zn, Sn and Pb, can etch glass if not properly removed.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity:	Data not available
Skin Corrosion/Irritation:	May cause irritation.
Eye Irritant:	May cause irritation.
Respiratory irritation:	Data not available
Germ Cell Mutagenicity:	Data not available
Carcinogenicity	Data not available
Reproductive Toxicity:	Data not available
STOT – single exposure	Data not available
STOT- repeated exposure:	Data not available
Aspiration Hazard:	Data not available

12. ECOLOGICAL INFORMATION

Persistence & degradability:	Will not bio accumulate
Bio accumulative potential:	Data not available
Mobility in soil:	Data not available

13. DISPOSAL CONSIDERATIONS

Dispose of in appropriately licence general landfill site in accordance with local, state, and federal regulations. Waste should be labelled. Special arrangements made to bury bulk waste upon dumping, limiting exposure.

14. TRANSPORTATION INFORMATION

The product is a not considered a dangerous good and not subject to the provisions of ADR (road), RID (railway), IMDG (sea) or IATA (airplane).

15. REGULATORY INFORMATION

Poisons Schedule: Not a scheduled poison (standard for the uniform scheduling of drugs and poisons NO. 22)

16. OTHER INFORMATION

This information is based on collective and current knowledge, is intended to describe the product for purposes of safety, environmental and health requirements only. It should therefore not be construed as guaranteeing any specific property of the product. The SDS is prepared by Hi Tech Ag (PTY) LTD

Key/Legend

<	Less Than	atm	Atmosphere
>	Greater Than	CAS	Chemical Abstracts Service (Registry Number)
AICS	Australian Inventory of Chemical Substances	cm ²	Square Centimetres
CO₂	Carbon Dioxide	COD	Chemical Oxygen Demand
(°C)	Degrees Celsius	K	Kelvin
g	Grams	GHS	Globally Harmonised System
g/cm ³	Grams per Cubic Centimetre	g/l	Grams per Litre
mmHg	Millimetre of Mercury	Kg	Kilogram
Kg/m ³	Kilograms per cubic metre	lb	Pound

SAFETY DATA SHEET

Hi- Sil Plus

LC50	Lethal Concentration of a material in air which causes the death of 50% of a group of test animals	LD 50	Lethal dose of material given all at once, which causes death of 50% of a group of test animals.
Ltr/L	Litre	m³	Cubic meter
mbar	Minibar	mg	Milligram
mg/24H	Milligrams per 24 Hour	mg/kg	Milligrams per Kilogram
mg/m³	Milligrams per Cubic Metre	mm	Millimetre
mmH2O	Millimetres of Water	mPa.s	Millipascals per Second
N/A	Not Applicable	NIOSH	National Institute for Occupational Safety and Health
NOHSC	National Occupational Health and Safety Commission	OECD	Organisation for Economic Co-operation & Development
Oz	Ounce	PEL	Permissible Exposure Limit
Pa	Pascal	ppb	Parts per Billion
ppm	Parts per Million	ppm/2h	Parts per Million per 2 Hours
ppm/6h	Parts per Million per 6 Hours	psi	Pounds per Square Inch
R	Rankine	RCP	Reciprocal Calculation Procedure
STOT	Specific Target Organ Toxicity	TLV	Threshold Limit Value
Tne	Tonne	TWA	Time Weighted Average
µg/24H	Micrograms per 24 Hours	UN	United Nations
wt.	Weight	Immiscible: Liquids are insoluble in each other	
Misc. or Miscible liquids form one homogenous liquid phase regardless of the amount of either component.			

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