

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Sazolene SC**
 Product Use: Slow release nitrogen fertilizer
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 8 July 2021

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

EPA Approval No: Fertilisers (subsidiary) – HSR002571

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Eye irritation Cat. 2	H319	Causes serious eye irritation.
Respiratory sensitisation Cat. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates

Prevention Code	Prevention Statement
P103	Read label before use.
P261	Avoid breathing fumes, vapours, spray.
P264	Wash hands thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.
P285	In case of inadequate ventilation wear respiratory protection.

Response Code	Response Statement
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P341	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Polymer UF (methylen-urea)	40 - 44	9011-05-6
Urea	23 - 26	57-13-6
Ingredients determined to be Non-Hazardous	To 100	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If on skin and if skin irritation or rash occurs, seek medical advice and attention.
If Swallowed	Immediately rinse the mouth with water; if swallowing has occurred, drink plenty of water and induce vomiting. Require medical assistance, if necessary.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Inhalation:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingested:	Not applicable.
Skin:	May cause an allergic skin reaction.
Eye:	Causes serious eye irritation.

Section 5. Fire Fighting Measures

Hazard Type	The product is non-flammable and non-combustible.
Hazards from combustion products	When involved in a fire and heated, the product may decompose and emit toxic fumes of nitrogen oxides, carbon monoxide, dioxide and ammonia. Don't breathe fumes.
Suitable Extinguishing media	Fires involving the product can be extinguished using vaporized water, foam, carbon dioxide or powder extinguishers; if circumstances allow, avoid the use of water to prevent damage and leakage of product.
Precautions for firefighters and special protective clothing	Cool with water the containers exposed to heat. Move away containers next to the fire; if this is not possible, cool them with water. The personnel involved must use full-face masks or self-contained breathing apparatus and wear appropriate clothing. The water used to extinguish the fire, if contaminated by the product, must be brought to suitable treatment plants.
HAZCHEM CODE	None allocated.

Section 6. Accidental Release Measures

Ensure adequate air ventilation. Do not get in eyes, on skin, or on clothing. Wear PPE as detailed in Section 8. Keep unnecessary and unprotected personnel from entering.

Prevent spreading in sewers. Prevent soil and water pollution. Dam up the liquid spill.

Contain spillage with sand, sawdust or other absorbent material; cover drains the sewage system with the special mats. Storage tanks should be located in areas equipped with containment basin of suitable capacity. The mobile containers shall be placed on special containment tanks.

Dispose of according to Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Avoid breathing fumes, vapours, spray.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Ensure good ventilation of the areas of storage and handling.
- Loading, unloading and handling operations must be done by skilled staff; possibly adopt a closed-loop system. To minimize occupational exposure may be helpful the use of respiratory protective equipment, clothes, glasses, rubber gloves or barrier cream.
- If spillage occurs, thoroughly air out the contaminated area and confine and recovery with care with sand, sawdust or other absorbent material.
- Do not eat, drink or smoke when using this product.
- In case of inadequate ventilation wear respiratory protection.

Precautions for Storage:

- It's recommended to store the liquid SAZOLENE SC into containers corrosion resistant, for example, stainless steel type 1.4301 (AISI 304) or type 1.4401 (AISI 316), fiberglass, polyethylene or polypropylene; can also be used carbon steel but care must be taken to corrosion.
- SAZOLENE SC doesn't have storage problems: in their original packages and in dry locations at moderate temperature, the product can be conserved without any alteration of their properties for at least one year. For an optimal conservation, the temperature should be kept in the range 5 ÷ 25 °C.

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

Engineering Controls

The storage and handling areas should be well ventilated; provide adequate local exhaust ventilation at points of possible emission of ammonia.

Personal Protection Equipment

Eyes	Provide eyes protection with splash-proof goggles or face shield in compliance with EN 166 norm. Avoid contact lenses.
Hands	Protective gloves resistant to chemical substances in compliance with EN 374 standard. Materials suitable also for a prolonged and direct contact (recommendation: protection index 6, corresponding to > 480 minutes of breakthrough time according to EN 374 norm): butyl rubber, thickness 0,7 mm nitrile rubber (NBR), thickness 0,4 mm
Skin	Wear suitable protective clothing, preferably cotton, for complete skin protection and safety shoes (e.g. according to EN 14605).
Respiratory	The product doesn't contain hazardous substances; Sazolene SC contains urea and then during use can be liberated small amount of ammonia vapours. If necessary, use masks for respiratory protection with filters for Ammonia (K1 = green).
General	Do not smoke, eat or drink in the working places. Remove contaminated clothing. Have eye wash bottle or eye rinse ready to use and a shower at work place. Wash hands before eating or drinking.

Section 9**Physical and Chemical Properties**

Appearance	Liquid
Colour	Clear or slightly cloudy
Odour	Slightly ammoniac
Odour Threshold	Not available
pH	9 + 11 at 20 °C
Boiling Point	> 100°C
Melting Point	< - 15 °C
Freezing Point	Not available
Flash Point	> 100 °C
Flammability	Not flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Relative Density	1.2 + 1.3 kg/dm ³ at 20 °C

Solubilities	Soluble in water
Log Pow	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	decomposes at temperatures greater than 250 °C
Viscosity	10 + 50 mPa.s
Particle Characteristics	Not available
Explosive Properties	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under recommended storage and treatment circumstances.
Possible hazardous reactions	No hazardous reactions.
Conditions to Avoid	Avoid exposure to heat sources.
Incompatible Materials	No one in particular.
Hazardous Decomposition Products	SAZOLENE SC does not decompose when used for intended uses.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye	Causes serious eye irritation.
Skin	May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12. Ecotoxicological Information

Hazardous to terrestrial vertebrates.

SAZOLENE SC is a slow release nitrogen fertilizer, use according to good working practices, avoiding release of the product in water courses.

The ecological data for the product are not available.

Persistence and degradability	SAZOLENE SC is gradually degrading when dispersed in the ground, releasing products which are metabolized by bacteria. Urea: The substance is readily biodegradable (according to OECD criteria).
Bioaccumulation	Product: No data available Urea: The low value of Log Pow (-1,73 à 25 °C) indicates the low bioaccumulative potential of Urea.

Mobility in Soil	Product: No data available Urea: From literature data, the Log Kow values resulted from the various tests, suggest that Urea has from a moderate to a high soil mobility.
Other adverse effects	No data available

The following are the ecological information on the main components of the mixture.

Acute fish toxicity:

Urea CL50 (96h) = > 10,000 mg/L, Leuciscus idus

Aquatic invertebrates toxicity:

Urea EC50 (48 h): > 10,000 mg/L Daphnia magna, literature data.

Algae and aquatic plants toxicity:

Urea NOEC for freshwater algae = 47 mg/L

Section 13. Disposal Considerations

Disposal Method:

Triple rinse and dispose according to Local Regulations.

Disposal methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ; NZS 5433:2012

Section 15 Regulatory Information

EPA Approval Code: **Fertilisers (subsidiary) – HSR002571**

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	1000L
Secondary Containment	1000L
Restriction of Use	None

Section 16 Other Information

Glossary

Cat	Category
EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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