Material:

Landscape Lock

Version: 1.0 (AU)

Date of last alteration: 01.02.2016

SEC	CTION 1: Identification of the subst	ance/mixture and of the company/undertaking	
1.1	Product identifier		
	Commercial product name:	Landscape Lock Concentrate	
1.2	Relevant identified uses of the substanc	e or mixture and uses advised against	
	Use of substance / preparation: Industrial a	and Domestic	
	Binder for: Garden Much and pebbles		
	All other areas of application to be agreed v	with the Application Engineering/ Technical Marketing Department of the manufacturer.	
1.3	Details of the supplier of the safety data sheet		
	Manufacturer: Street No.:	Hydrox Technologies Pty Ltd 36 Boron Street	
	State/postal code/city: Telephone: Telefax:	Sumner Park, QLD, 4074 +61 7 3279 2554 +61 7 3279 2244	
	Emergency telephone number	+61 7 3279 2554	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Hazardous Chemical according to the criteria of NOHSC. Non-Dangerous Goods to the ADG Code.

Classification:

Description

May cause sensitization by skin contact.

2.2 Label elements

×	Xi	Irritant
R-Phrase		Description
R43		May cause sensitization by skin contact.
S-Phrase		Description
S36/37		Wear suitable protective clothing and gloves.

Hazard ingredients (labelling EC):

5-Chloro-2-methyl-4-isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on (mixture in a ratio of 3:1)

2.3 Other hazards

No data available.

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SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

3.2.1 Chemical characteristics

Copolymer of: vinyl acetate + ethylene (dispersion in water)

3.2.2 Hazardous ingredients

EC-No.	CAS No.	Material	Content %	Warr	ning Label (EC)
				Symbol	R-Phrases*
	55965-84-9	5-Chloro-2-methyl-4-isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on (mixture in a ratio of 3:1)	<0.01	Τ, Ν	R23/24/25-34-43- 50/53

If the sum of ingredients is less than 100%, the material consists of further ingredients determined not to be hazardous or below their cut-off limits.

*Classification codes are explained in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Take persons to a safe place. Observe self-protection for first aid. In the event of allergic reactions, particularly those affecting the respiratory system, seek immediate medical advice.

After contact with the eyes:

Rinse immediately with plenty of water for 10-15 minutes. Keep eyelids well open to rinse the whole eye surface and eyelids with water. Seek medical advice and clearly identify substance.

After contact with the skin:

Remove contaminated or soaked clothing. Wash off with plenty of water or water and soap immediately for 10-15 minutes. In serious cases, use emergency shower immediately. Seek medical advice and clearly identify substance.

After inhalation:

Keep the patient calm. If unconscious place in stable sideways position. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice and clearly identify substance.

After swallowing:

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice and clearly identify substance.

Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

4.3 Advice for the doctor:

4.2

Due to its physical properties, may cause mechanical irritation. Product may agglutinate in the gastro-intestinal tract. Medical assistance should be sought. Depending on the symptoms, invasive measures may be necessary. Product can lead to sensitization and can trigger allergies. After inhalation: treat as early as possible using cortisone spray. Further toxicology information in section 11 must be observed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: not applicable.

Extinguishing media which must not be used for safety reasons: not applicable.

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5.2 Special hazards arising from the substance or mixture

At low oxygen level: acetic acid.

5.3 Advice for firefighters

Special protective equipment for firefighting:

Use respiratory protection independent of recirculated air.

General information:

Product does not burn. Use extinguishing measures appropriate to the source of the fire. Dried up material is combustible.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (see section 8). If material is released indicate risk of slipping.

6.2 Environmental precautions

Prevent material from entering sewers or surface waters. Contain any fluid that runs out using suitable material (e.g. earth).

6.3 Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

General information:

Avoid exposure by technical measures or personal protective equipment.

Precautions for safe handling:

Spilled substance increases risk of slipping.

Precautions against fire and explosion:

No special precautions against fire and explosion required.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels: Protect against frost.

Advice for storage of incompatible materials: not applicable.

Further information for storage:

not applicable.

Minimum temperature allowed during storage and transportation: 0 °C

7.3 Specific end use(s)

No data available.

7.4 Regulations and standards (Australia):

Store and handle in accordance with Work Health & Safety Regulations or Occupational Health & Safety Regulations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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Method:

	Maximum airborne concentrations at the workpla not applicable	ice:
8.2	Exposure controls	
8.2.1	Exposure in the work place limited and controlle	d
	General protection and hygiene measures: Do not eat or drink when handling.	
	Personal protection equipment:	
	Respiratory protection	
	not required.	
	Eye protection	
	protective goggles.	
	Hand protection	
	Rubber gloves.	
	Skin protection	
	wear suitable protective clothing and gloves.	
8.2.2	Exposure to the environment limited and control	led
	Prevent material from entering surface waters and so	pil.
8.3	Further information for system design and engin	eering measures
	No special measures required.	
	TION 0. Divisional and all aminant managements	
	TION 9: Physical and chemical properties	
9.1	Information on basic physical and chemical prop	erties
	Property:	Value:
	Appearance Physical state / form:	liquid
	Colour	•
	Odour	
	Odour:	weak
	pH-Value	
	pH-Value Melting point/freezing point	4.0 - 6.0
	Melting point / melting range	approx. 0.00 °C

Cucui		
Odour	weak	
pH-Value		
pH-Value	4.0 - 6.0	(specific method)
Melting point/freezing point		
Melting point / melting range	approx. 0.00 °C	
Initial boiling point and boiling range		
Boiling point / boiling range	approx. 100 °C at 1013 hPa	
Flash point		
Flash point	not applicable	
Upper/lower flammability or explosive limits		
Lower explosion limit (LEL)	not applicable	
Vapour pressure		
Vapour pressure	23 hPa at 20 °C	
Solubility(ies)		
Water solubility / miscibility	moderately soluble	
Vapour density		
Relative gas/vapour density	No data known.	
Relative Density		
Relative Density	approx. 1.07 (20 °C)	(specific method)
	(Water / 4 °C = 1,00)	
Density	approx. 1.07 g/cm ³ (20 °C)	(specific method)
Partition coefficient: n-octanol/water		
Partition coefficient: n-octanol/water	No data known.	

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Auto-ignition temperature		
Ignition temperature Viscosity	not applicable	
Viscosity (dynamic)	2900 - 3900 mPa.s at 25 °C	(specific method)

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid

none known.

10.5 Incompatible materials

none known.

10.6 Hazardous decomposition products

If stored and handled properly: none known. At increased temperature: acetic acid.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.1.1 General information

Data derived for the product as a whole are of higher priority than data for single ingredients.

11.1.2 Acute toxicity

Assessment:

Based on the available data acute toxic effects are not expected after single oral exposure.

Product details:

Route of ex	posure Result/Effect	Species/Test system	Source
oral	LD ₅₀ : > 2000 mg/kg	rat	Conclusion by
	50 5 5		analogy
			OECD 423

11.1.3 Skin corrosion/irritation

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected.

Product details:

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by
		analogy
		OECD 404

11.1.4 Serious eye damage / eye irritation

Assessment:

Based on the available data a clinically relevant eye irritation hazard is not expected.

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Product details:

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by
		analogy
		OECD 405

11.1.5 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

Data related to ingredients:

5-Chloro-2-methyl-4-isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on (mixture in a ratio of 3:1):

Based on the proven low sensitization induction threshold in human, mixtures containing ≥15 ppm are classified as skin sensitizing in Europe.

11.1.6 Germ cell mutagenicity

Assessment:

Based on known data a significant mutagenic potential may be excluded.

Product details:

Result/Effect	Species/Test system	Source
negative	mutation assay (in vitro)	Conclusion by
	bacterial cells	analogy
		OECD 471

11.1.7 Carcinogenicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Reproductive toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (single exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Specific target organ toxicity (repeated exposure)

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.11 Aspiration hazard

Assessment:

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

SECTION 12: Ecological information

12.1 Toxicity

Assessment:

No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

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Product details:

Result/Effect	Species/Test system	Source
LC ₅₀ : > 100 mg/l	rainbow trout (Oncorhynchus mykiss) (96 h)	Conclusion by analogy OECD 203
EC ₁₀ : > 1000 mg/l	sludge (0.5 h)	Conclusion by analogy

12.2 Persistence and degradability

Assessment:

Polymer component: Not readily biodegradable. Elimination by adsorption to activated sludge. Separation by flocculation is possible.

12.3 Bio accumulative potential

Assessment:

No adverse effects expected.

12.4 Mobility in soil

Assessment:

No adverse effects expected.

12.5 Other adverse effects

none known

12.6 Additional information

The Eco toxicological results provided were obtained from tests with similar products.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Material

Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.

13.1.2 Uncleaned packaging

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

Recommended cleaning agent: water

SECTION 14: Transport information

14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group

Land transport ADG Code (road and rail):

Valuation Not regulated for transport

Transport by sea IMDG-Code:

Valuation Not regulated for transport

Air transport ICAO-TI/IATA-DGR:

Valuation Not regulated for transport

14.5 Environmental hazards

Hazardous to the environment: NO

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14.6 Special precautions for user

Relevant information in other sections has to be considered.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk transport in tankers is not intended.

SECTION 15: Regulatory information

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

National and local regulations must be observed.

For information on labelling please refer to section 2 of this document.

15.1.1 Poisons Standard (Standard for the Uniform Scheduling of Medicines and Poisons; SUSMP)

Poisons Schedule number:

Not a Scheduled Poison.

SECTION 16: Other information

16.1 Material

The details in this document are based on the state of our knowledge at the time of revision. They do not constitute an assurance of the described product properties in terms of statutory warranty requirements.

The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

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