

Section 1 - Identification of the Material and Supplier

Chemical nature: Water treatment
Trade Name: DRIP-RITE 1000
Product Use: Liquid water treatment
Supplier: Nuturf (A division of Amgrow Pty Ltd)
3/29 Birnie Ave, Lidcombe NSW 2141
Phone: 02 9395 1200 (office hours), Fax: 02 9395 1241
www.amgrow.com.au
Creation Date: August 2017 and is valid for 5 years from this date.
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

NOT LISTED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA.

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO AUSTRALIAN DANGEROUS GOODS (ADG) CODE, IATA & IMDG/IMSBC CRITERIA. (SEE SECTION 14)

SUSMP Classification: None allocated.

UN Number: 1760



GHS Signal word: DANGER

Acute toxicity - oral Category 5
Acute toxicity, inhalation Category 5
Skin corrosion/irritation Category 1B
Serious eye damage/eye irritation Category 1

HAZARD STATEMENT:

H303: May be harmful if swallowed
H333: May be harmful if inhaled
H314: Causes severe skin burns and eye damage.
H290: May be corrosive to metals.

PREVENTION

P102: Keep out of reach of children.
P234: Keep only in original container.
P260: Do not breathe fumes, mists, vapours or spray.
P264: Wash contacted areas thoroughly after handling.
P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P310: Immediately Call a POISON CENTRE or doctor/physician
P363: Wash contaminated clothing before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304+P340: IF INHALED: Remove person to fresh air and keep 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.

STORAGE

P405: Store locked up.
P406: Store in corrosive resistant container with a resistant inner liner.

DISPOSAL

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview

Physical Description & Colour: Light pink to light purple liquid

Odour: No odour.

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Issued by: Amgrow Pty Ltd

Phone: 02 9395 1200 (office hours)

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

Major Health Hazards: causes burns, respiratory tract irritant.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc. %
Monocarbamide dihydrogen sulfate	21351-39-3	90-100

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: If irritation occurs, contact a Poisons Information Centre, or call a doctor. Remove source of contamination or move victim to fresh air. Keep at rest in a position comfortable for breathing.

Skin Contact: Under running water, immediately remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts). Call a physician or poison control centre immediately. Chemical burns must be treated by a physician.. Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. Do not interrupt flushing. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Wash contaminated clothing before reuse

Eye Contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 20-30 minutes, by the clock, while holding the eyelid(s) open. Neutral saline solution may be used as soon as it is available. Do not interrupt flushing. If necessary, keep emergency vehicle waiting (show paramedics this MSDS and take their advice). Take care not to rinse contaminated water into the unaffected eye or onto face. If irritation persists, repeat flushing. Call a Poisons Information Centre or a doctor urgently. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.

This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire Decomposition Products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires. Do not use water jet as this will spread fire

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

Flash point: Does not burn.
Upper Flammability Limit: Does not burn.
Lower Flammability Limit: Does not burn.
Autoignition temperature: Not applicable - does not burn.
Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including eye/face protection, gauntlets and self contained breathing apparatus. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the corrosiveness of this product, special personal care should be taken in any cleanup operation. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute

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alkali. Baking soda, washing soda and limestone are suitable. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in a cool, well ventilated area. Check containers periodically for corrosion and leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10.

Section 8 - Exposure Controls and Personal Protection

SWA Exposure Limits TWA (mg/m³) STEL (mg/m³) ADI (mg/Kg/day) NOEL (mg/Kg/day)

Exposure limits have not been set for any ingredients in product. The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level.

Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Your eyes must be completely protected from this product by splash resistant goggles with face shield. All surrounding skin areas must be covered. Emergency eye wash facilities must also be available in an area close to where this product is being used.

Skin Protection: Because of the dangerous nature of this product, make sure that all skin areas are completely covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC, Viton, nitrile.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Light pink to light purple liquid.
Odour:	No odour.
Boiling Point:	100°C
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	No specific data. Expected to be low at 100°C.
Vapour Pressure:	No data.
Vapour Density:	As for water.
Specific Gravity:	1.51
Water Solubility:	Completely soluble in water.
pH:	1 (10% solution)
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	As for water.
Coeff Oil/water Distribution:	No data
Autoignition temp:	Not applicable - does not burn.

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Section 10 - Stability and Reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under normal temperature conditions.

Possibility of hazardous reactions: Corrosive to 304 stainless steel. Slightly corrosive to 316 stainless steel.

Conditions to avoid: Avoid contact with hypochlorites, sulfides, or alkaline materials. Avoid storage, piping, or handling systems made of copper, zinc, or their alloys (bronze, brass, galvanized metals, etc.)

Incompatible materials Hypochlorites, sulfides, or alkaline materials. Incompatible with nylon and nylon beads.

Hazardous decomposition products: Heating to dryness may cause the release of carbon dioxide gas.

Will not polymerise.

Section 11 - Toxicological Information

Target Organs: There is no data to hand indicating any particular target organs.

Toxicity: Dermal LD50 Rat > 2000 mg/kg, Oral LD50 Rat = 350 mg/kg

Potential Health Effects

Inhalation: May be harmful if inhaled This product is an inhalation irritant.

Skin Contact: This product is corrosive to the skin. Capable of causing severe burns with ulceration. Can penetrate to deeper layers of skin, resulting in third degree burns. Corrosion will continue until product is removed or neutralised. Severity depends on concentration and duration of exposure.

Eye Contact: Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Severe eye irritation. Permanent eye damage including blindness could result.

Ingestion: Significant oral exposure is considered to be unlikely. However, this product is corrosive to the gastrointestinal tract. Capable of causing moderate to severe burns with ulceration.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 12 - Ecological Information

Ecotoxicity Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and degradability: No data is available on the degradability of this product.

Bioaccumulative potential: Not available.

Mobility in soil: No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - Disposal Considerations

Disposal: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport Information

Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.

UN Number: 1760, CORROSIVE LIQUIDS, N.O.S. (Monocarbamide dihydrogen sulfate (MCDS))

Hazchem Code: 2R

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 L for this class of product.

Dangerous Goods Class: Class 8: Corrosive Substances.

Packaging Group: III

Packaging Method: P001, IBC03, LP01

Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the

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same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail	IMDG	International Maritime Dangerous Good
AICS	Australian Inventory of Chemical Substances	IMSBC	International Maritime Solid Bulk Code
CAS number	Chemical Abstracts Service Registry Number	NTP	National Toxicology Program (USA)
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters	SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
IARC	International Agency for Research on Cancer	SWA	Safe Work Australia (formerly ASCC and NOHSC)
IATA	International Air Transport Authority	UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (2011)
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