

SUMMIT

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SUMMIT
Other identifier: Diaminomethanal + Ammonium salt
Recommended use: Adjuvant
Restrictions on use: Agriculture

Supplier: Villa Crop Protection (Pty) Ltd
Co. Reg. No.: 1992/002474/07
PO Box 10413,
Aston Manor, 1630, South Africa
Telephone: (011) 396 2233
Fax: (011) 396 4666
Website: www.villacrop.co.za

Emergency telephone numbers:
24 Hr Transport / Spill emergency no:
(Hazcall24) +27 86 044 4411
(Client: Villa Crop Protection)
Griffon Poison Information Centre +27 82 446 8946
(Client: Villa Crop Protection)
Poisoning Emergency telephone numbers:
Griffon Poison Information Centre +27 82 446 8946
Poisons Information Centre +27 861 555 777

2. HAZARDS IDENTIFICATION

UN GHS, Regulation EC 1272/2008 [EU-GHS/CLP] EU & SANS 10234:2008		
Hazard classes	Hazard categories	H-statements
Health		
Oral	Acute Tox. 5	H303
Eye	Eye Irrit. 2	H319

The most important adverse effects:
Physicochemical effects: None known
Human health effects:
May be harmful if swallowed (Acute Tox. 5).
Causes serious eye irritation (Eye Irrit. 2).

Label elements:



Signal word: Warning

Hazard statements:
H303: May be harmful if swallowed.
H319: Causes serious eye irritation.

Precautionary statements:

P264+P265: Wash hands thoroughly after handling. Do not touch eyes.
P280: Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P301+P317: IF SWALLOWED: Get medical help.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P317: If eye irritation persists: Get medical help.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Unclassified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Chemical name	CAS	Conc. (m/v %)	Classification EC 1272/2008
Urea ammonium nitrate (28%-32% nitrogen)	15978-77-5	49.98%	Eye Irrit. 2 (H319)
Ammonium nitrate solution (diaminomethanal)	6484-52-2	49.98%	Ox. Sol. 3 (H272) Eye Irrit. 2 (H319)

4. FIRST AID MEASURES

Remove the victim from the area of exposure. Wash off remaining material with plenty of water. In the event of any complaints or symptoms, avoid further exposure.

Inhalation: Remove person from contaminated area to fresh air and assist breathing as needed. **Seek medical attention if irritation occurs.**

Skin: Remove contaminated clothing and shoes. Gently wipe off excess chemical. Wash skin gently and thoroughly with water and non-abrasive soap. **Obtain medical attention if irritation persists.**

Eyes: Flush eyes with clean water for at least 15 – 20 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. **Seek medical attention.**

Ingestion: Seek medical attention or call a poison control centre for treatment advice. Do not induce vomiting unless instructed to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. If the person is alert, rinse mouth thoroughly with water.

Anticipated acute effects: May be harmful if swallowed. Causes serious eye irritation.

Anticipated delayed effects: None known.

Most important symptoms / effects: None known.

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Advice to physician: Both ammonium & diaminomethanal components have diuretic actions. Large doses may cause vomiting. Acidosis may occur in presence of impaired renal function. Treat for methemoglobinemia.

washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. See section 13 for disposal considerations.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide or dry chemical for small fires and water fog or foam for large fires.

Unsuitable Extinguishing Media: High volume water jet. Use a water jet only to cool heated containers.

Specific hazards: Will not burn or support combustion, but will decompose into noxious, poisonous gases when exposed to the high temperatures of a fire. The solutions may become explosive if combined with a flammable substance and/or dried to a low percentage of water.

Special fire-fighting procedures: Remove spectators from surrounding area. Isolate the fire area and evacuate all personnel downwind of the fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Remain upwind of fire. Avoid inhaling hazardous vapours and fumes from burning materials. Remove container from fire area if possible and without risk. Do not use high volume water jet, due to contamination risk. Do not scatter the burning material. Water can be used to cool unaffected containers but must be contained for later disposal. Contain fire control agents for later disposal.

Personal protective equipment: Wear NIOSH / MSHA approved self-contained breathing apparatus and full protective gear.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: May be harmful if swallowed. Causes serious eye irritation. Avoid contact with skin and eyes. Ensure adequate ventilation during handling and use. Do not handle broken packages without protective equipment. Immediately clean up spills that occur during handling. Keep containers closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original, labelled container, tightly closed in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Concentrated acids such as nitric acid, strong bases, and heat. Hypochlorite's or chlorine may react with **SUMMIT** to form nitrogen trichlorite that may be explosive.

Packaging material: Plastic bottles and plastic containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with eyes. Do not breathe in spray mist or dust / fumes / vapours. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water.

Methods and Materials for Containment: Contain spilled product by diking area with sand or earth.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite, earth or other appropriate material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible concentration

No occupational exposure limits have been determined for the significant ingredients in this product.

Engineering Controls:

It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OELs or other specified exposure limits. Local exhaust ventilation is preferred. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

Personal Protective Equipment:

Respiratory Protection: Dried salt or aerosol solution will dissolve with mucosal membrane contact (lungs). For

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most well-ventilated conditions, no respiratory protection should be needed. If used in a poorly ventilated area (airborne concentrations exceed exposure limits), use a NIOSH approved, air-purifying respirator with cartridges / canisters approved for organic vapours.

Hand Protection: The use of chemically protective (impervious) gloves is recommended to prevent against skin contact.

Eye Protection: It is an aqueous salt solution and will dissolve with mucosal membrane contact (eyes). The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Employees must wear appropriate protective (impervious) clothing, (rubber) boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

Emergency eyewash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Translucent to Transparent.

Odour: Faint ammonia odour.

Odour threshold: Not available.

pH (1% aqueous dilution): 5.7 to 7.2 at 20°C

Melting point: Not available.

Freezing Point: 0 °C.

Boiling Point: 100 °C

Flash Point: Not flammable.

Flammability: Not flammable.

Upper / lower explosion limits:

Vapour Pressure (mm Hg): 8.6 to 17.5 mm Hg

Relative Vapour Density: Not available.

Density / Relative density: 1.28 g/ml @ 20 °C.

Solubility: Readily soluble in water (118g / 100g water at 20°C)

n-octanol / water partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: 114 °C

Viscosity: Not available

10. STABILITY AND REACTIVITY

Chemical stability: The product is stable for two years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50 °C, preferably below 30 °C, and not for prolonged periods in direct sunlight.

Reactivity: None known.

Possibility of hazardous reactions: Concentrated acids such as nitric acid, strong bases, and heat. Hypochlorite's or chlorine may react with **SUMMIT** to form nitrogen trichlorite that may be explosive.

Conditions to avoid: Extreme heat or exposure to flames.

Incompatible materials: Concentrated acids such as nitric acid, strong bases, and heat. Hypochlorite's or chlorine may react with **SUMMIT** to form nitrogen trichlorite that may be explosive.

Hazardous decomposition products: Ammonia, oxidized further to Nitric Oxide, Nitrogen Dioxide.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral LD₅₀ (24h) 4002.00 mg/kg (rat)

Dermal LD₅₀ Not classified.

Inhalation LC₅₀ Not classified.

Skin Irritation / Corrosion Not classified.

Eye Damage / Irritation: Causes serious eye irritation.

Skin Sensitization: Not classified.

Respiratory Sensitization: Not classified.

Reproductive cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Not classified.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Not classified.

Aspiration hazard: Not classified.

Chronic Effects: Not classified.

POTENTIAL ADVERSE EFFECTS:

Inhalation: Not classified.

Ingestion: Causes serious eye irritation.

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Urea ammonium nitrate + diaminomethanal

Fish:

LC ₅₀ (96 h)	<i>Oncorhynchus mykisso</i>	103 mg/l
	<i>Pimephalas promelas</i>	100-500 mg/l

ENVIRONMENTAL EFFECTS

Based on information for the active ingredients:

Urea ammonium nitrate + diaminomethanal

Animals: Product can cause poisoning to livestock or poultry.

Plants:

Persistence and degradability: Product is considered a water pollutant and toxic to aquatic life. Algae blooms may form in static water contaminated with **SUMMIT**. The ammonia may form nitrates or nitrites in water, which will decrease the dissolved oxygen.

Bio-accumulative potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: Not determined.

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13. DISPOSAL CONSIDERATIONS

Waste: SUMMIT is not considered a hazardous waste. Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or re-processed. Never pour untreated waste or surplus product into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers. Comply with local legislation applying to waste disposal. The product may be taken to a registered waste disposal site or incineration plant.

Container: Emptied containers retain product residues. Do not re-use the empty container for any other purpose. Invert the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter **RINSE THE EMPTY CONTAINER THREE TIMES** in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler (www.croplife.co.za). Do not bury, burn or donate the container to any other parties that may use it as a container for food or beverages. Observe all labelled safeguards until container is destroyed.

14. TRANSPORT INFORMATION

UN Number: Not Regulated

Not classed i.e., considered non-hazardous material according to UN Orange Book and international transport codes e.g., RID (rail) and IMDG (sea)

Special / Environmental Precautions: Wedge drums tightly to avoid movement. (Product dependent, additional safety suggestions).

Transport in bulk: Refer to MARPOL 73/78, Annex II and the IBC code.

15. REGULATORY INFORMATION

Safety, health and environmental regulations / legislation for the mixture:

OHSA 1993 Regulations for Hazardous Chemical Substances.

Relevant information regarding restrictions: None.

EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)

Other national regulations: None.

Chemical Safety Assessment carried out? No

16. OTHER INFORMATION

Packaging: Packed in 1, 5, 10, 20 and 25 litres plastic bottles and plastic drums labelled according to South African regulations and guidelines.

Other hazard statements, abbreviations and explanations:

- H272:** May intensify fire; oxidizer.
- IATA:** International Air Transport Association.
- IBC:** International Bulk Chemical.
- ICAO:** International Civil Aviation Organization.
- IMDG:** International Maritime Dangerous Goods
- IMO:** International Maritime Organization.
- LD₅₀ value:** The median lethal dose or the amount of a toxic agent that is sufficient to kill 50 percent of a population within a certain period of time.
- OEL/RL:** Occupational exposure limit-recommended limit.
- TWA:** Time-weighted average – The average exposure over a specified period, usually a nominal eight hours.
- ST/STEL:** Short-term exposure limits.
- Disclaimer:** The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed. All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

END OF DOCUMENT

- Compiled:** August 2008
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- Revision no.:** (3)
- Next revision date:** August 2027

For detailed information on revisions, contact the Registration holder.