

MATERIAL SAFETY DATA SHEET

ALLBUFF



Reg nr.: 2004/020524/07

PLANT PROTECTION

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: ALLBUFF
pH Buffer
UN No.: 2790
Supplier: Tsunami Plant Protection (Pty) Ltd
POBox 466, Heidelberg, 1438,
South Africa
Telephone: 011 812 9800
Fax: 011 812 9812
E-mail: info@tsunami.co.za
Web address: www.tsunami.co.za

24 Hr Emergency Number: 082 771 2712
In case of Poisoning:
Poison Information Centre 082 446 8946
Tygerberg Hospital: (021) 931 6129
Poison Emergency Enquiries (021) 689 5227
In case of Spillage:
HAZMAT: 0800 147 112

2. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: organic buffer system and alkylated phenoethyl oxide condensate
Chemical Name: 1) acetic acid 2) ammonia
CAS No.: 1) 64-19-7 2) 1336-21-6
Chemical formula: 1) C₂H₄O₂ 2) NH₄OH
Use: A Buffering agent to increase the efficacy of pH sensitive agricultural chemicals and improving the wetting and spreading properties of spray mixtures.
Formulation: Organic buffer system and alkylated phenoethylene oxide condensate: 484,7 g/l
Water soluble liquid

Hazardous ingredients of toxicological concern:

<u>Inert:</u>	<u>concern:</u>	<u>% present:</u>
Acetic acid & ammonia solution	corrosive, irritant	± 48 %
water	none	± 45 %
alkylated oxide condensate	none	± 5 %

Symbol: C, Xi
Indication of danger: Corrosive, Irritant
Risk Phrases: R20, R34, R36/37/38, R41, R51

3. HAZARD IDENTIFICATION

Likely routes of exposure:
Toxicity class: Not available
Main hazard: May cause severe eye irritation, irritant to the skin and harmful if ingested.
Flammability: Not flammable or explosive.
Biological hazards: Skin contact, ingestion and inhalation
Eye contact: May cause severe eye irritation. Irritation may develop after exposure to mists, aerosols or vapors. Splash contact may cause corneal erosions.
Skin contact: Irritating to the skin.
Ingestion: Oral ingestion may produce mild to moderately severe oral and esophageal burns with more severe burns occurring in the stomach.
Inhalation: Minimally toxic by inhalation.

4. FIRST AID MEASURES AND PRECAUTIONS

Inhalation:
Remove the source of contamination or move victim to fresh air. Keep the patient under observation. Treat symptomatically and supportively. If irritation persists, obtain medical attention immediately.
Skin contact:
Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with cold water and non-abrasive soap. If irritation persists obtain medical attention.
Eye contact:
Flush eyes immediately with large amounts of gently flowing cold water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15 to 20 minutes). If irritation persists, get medical attention.
Ingestion:
Do not induce vomiting. Do not give anything by mouth. If the person is alert, rinse mouth thoroughly with water. Obtain medical attention immediately. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus. Dilute the acid by giving the person large quantities of water or milk to drink. **Do not** give bicarbonate to neutralize.
Advice on treatment:
There is no specific antidote available.
This product contains materials that may cause pneumonitis if aspirated. Observe patient for respiratory difficulty from aspiration pneumonitis. Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Fire and explosion hazard:
This material is not flammable. Not combustible.
Extinguishing agents:
Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal.
Fire fighting:
Remove spectators from surrounding area. Remove container from fire area if possible. Contain fire control agents for later disposal. Use a recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind.

Personal protective equipment:
Fire may produce irritating, corrosive and/or toxic oxides of carbon. Fire fighters and others that may be exposed should wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:
Avoid contact with skin and eyes. Do not breathe in spray or fumes. For personal protection see Section 8.
Environmental precautions:
Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Product is considered a Marine Pollutant.

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Occupational spill:

Remove all sources of flames and sparks. For small liquid spills, soak up with lime, damp earth or sand, or other non-combustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

7. HANDLING AND STORAGE REQUIREMENTS

Handling:

Moderately toxic by inhalation. Harmful if swallowed. Harmful by skin or eye contact. Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator:

It is usually safe to use the product without respirator. Where exposure through inhalation may occur when handling and or using the product, wear a face mask. If the product is used in dusty or confined conditions or spillage and fire conditions a respirator suitable for protection from dusts and mists of pesticides is adequate.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

The use of safety goggles is recommended.

Emergency eye wash: 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: Homogeneous clear green liquid.

Odour: pungent odour.

Flammability: Non flammable

Solubility: Soluble in water.

pH: 4,8 – 5,2

Density: 1,064 – 1,074 g/ml

Corrosiveness: corrosive to metal.

10. STABILITY AND REACTIVITY

Stability:

Chemically and thermally stable. Stable under normal storage conditions. Considered stable for a period of 2 years under recommended warehouse and light conditions. .

Incompatibility:

Incompatible with strong oxidizing substances, strong alkaline materials, caustic soda and lime. Product reacts with heavy metals, their salts and may form explosive compounds.

Hazardous decomposition products:

Thermal decomposition products are toxic and may include oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Acute oral LD₅₀; Rat:

Acetic acid: 3310 mg/kg

Ammonium Solution: 350 mg/kg

Formulation (calculated): > 2000 mg/kg

Acute dermal LD₅₀; Rabbit:

Acetic acid: 1060 mg/kg

Formulation (calculated): corrosive

Acute inhalation LC₅₀; Mouse:

Acetic acid: 5620 ppm/1 hour

Ammonium solution: 4837 ppm/1 hour

The substance and the vapour is corrosive to the respiratory tract.

Symptoms: Sore throat, cough, burning sensation, headache, dizziness, shortness of breath, laboured breathing. Symptoms may be delayed.

Acute skin irritation:

The substance is corrosive to the skin. Severe irritant.

Acute eye irritation:

Severely irritating to eyes.

Dermal sensitization:

Repeated or prolonged contact with skin may cause dermatitis.

Carcinogenicity:

Animal studies on acetic acid did not detect any carcinogenic effects. No human information available.

Teratogenicity:

Animal studies on acetic acid did not detect any teratogenic effects.

No human information available.

Mutagenicity:

Animal studies on acetic acid did not detect any mutagenic effects.

No human information available.

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12. ECOLOGICAL INFORMATION

ECOTOXICOLOGY:

Fish:

Acetic acid: **Slightly toxic to aquatic organisms.**

Ammonia: **Highly toxic to aquatic organisms.**

Product is considered a marine pollutant.

- S 23** Do not breathe vapour/spray.
S 24/25 Avoid contact with skin and eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell seek medical advice immediately.
S 61 Avoid release to the environment.

13. DISPOSAL CONSIDERATION

Pesticide and container disposal:

Open dumping or burning of this product is prohibited. Never pour untreated waste or surplus products 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. Considered a Marine Pollutant.

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner. Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dump site. Prevent contamination of food, feedstuffs, drinking water and eating utensils.

16. OTHER INFORMATION

Packaging:

Packed in 1, 5, 10, 20 and 25 l fluorinated plastic containers and labelled according to South African regulations and guidelines.

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 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: May 2002 **Reviewed:** February 2009 (3)

14. TRANSPORT INFORMATION

UN NUMBER: 2790

Road Transport ADR/RID:

Class: 8
Packaging group: III
Shipping name: Acetic acid, Solution (corrosive)
(less than 50 % acid)

Maritime Transport IMDG/IMO:

Class: 8
Packing group: III
Shipping name: Acetic acid, Solution (corrosive)
(less than 50 % acid)

Considered a marine pollutant.

15. REGULATORY INFORMATION

Symbol: C, Xi
Indication of danger: Corrosive; Irritant

Risk phrase(s):

R 20 Harmful by inhalation
R 34 Causes burns.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 41 Risk of serious damage to eyes.
R 51 Toxic to aquatic organisms.

Safety phrases:

S 2 Keep out of reach children.
S 7 Keep container tightly closed.

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