

**FARM-AG INTERNATIONAL (Pty) Ltd**

P.O. Box 1523, Durban 4000

**Head Office :** 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

**Tel + 27 31 003 3486 • Fax + 27 31 502 5825****SECTION 1: PRODUCT AND COMPANY IDENTIFICATION****Product Name:** Beefabuff**Common Name:** Organic buffer system, Acetate buffer**Creation Date:** March 2012**Revision Date:** March 2021**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

**Recommended use:** lower the pH of alkaline and increase the pH of acidic spray water of natural origin to an optimum of 4.0 to 6.5 where it is buffered.**SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS****Product description:** It is a blue liquid

Component	CAS #
Sodium Acetate Trihydrate	6131-90-4
Acetic Acid	64-19-7
Water	7732-18-5

**SECTION 3 - HAZARD IDENTIFICATION****Emergency Overview:** Danger! Corrosive liquid. May be fatal if swallowed. Causes severe burns to all areas of contact. Harmful if inhaled. Inhalation may cause lung and tooth damage. Immediately wash areas of contact with plenty of water for at least 15 minutes. If ingested, give large quantity of water. Do not induce vomiting.**Target Organs:** eyes, skin, respiratory system, teeth.**Eye Contact:** Eye contact may cause severe eye damage followed by loss of sight. Vapour exposure may cause watering and irritation to eyes.**Inhalation:** Inhalation of concentrated vapours may cause serious damage to the lining of the nose, throat and lungs.**Skin Contact:** May cause serious damage to the skin. Effects may include redness, pain, skin burns.**Ingestion:** Swallowing can cause severe injury leading to death. Symptoms include sore throat, vomiting and death.**Chronic Effects/Carcinogenicity:** Repeated exposures may cause erosion of exposed front teeth, darkening of skin and chronic inflammation of the nose, throat and bronchial tubes.

IARC - No.

NTP - No.

OSHA - No.

**Teratology (Birth Defect) Information:** Mutation data cited in 'Registry of Toxic Effects of Chemical Substances' for Acetic Acid.**Reproductive Information:** No information found.**SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS****Eye Contact:** Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately.**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen.**Skin Contact:** Flush with plenty of water for at least 15 minutes. Call a physician if irritation develops.**Ingestion:** Do not induce vomiting. Give large quantity of water. Call a physician immediately.**SECTION 5 - FIRE-FIGHTING MEASURES****Flash Point:** 109°F (Acetic Acid)**Method Used:** CC**LFL:** 5.4% (Acetic Acid)**UFL:** 16.0% (Acetic Acid)

# FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

**Head Office :** 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

**Tel + 27 31 003 3486 • Fax + 27 31 502 5825**

**Extinguishing Media:** Use water spray, dry chemical, alcohol foam, or carbon dioxide for extinguishing the surrounding fire. Water spray can be used to dilute spills to non-flammable mixtures.

**Fire & Explosion Hazards:** Above flash point, vapour-air mixtures are explosive within flammable limits noted above. Contact with strong oxidizers may cause fire. Vapours can flow along surfaces to distant ignition source and flash back. Reacts with most metals to produce hydrogen gas, which can form explosive mixture with air.

**Fire Fighting Instructions:** Use normal procedures/instructions.

**Fire Fighting Equipment:** Use protective clothing and breathing equipment appropriate for the surrounding fire.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Absorb with suitable material (paper towels, etc.) and dispose of in accordance with local regulations. Ventilate, if necessary, site of spillage well to evaporate remaining liquid and disperse vapour.

## SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. **SAFETY STORAGE CODE:** Corrosive

## SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit.

**Respiratory Protection:** Work with adequate ventilation or wear respirator with acid gas/organic vapour cartridge.

**Skin Protection:** Chemical resistant gloves.

**Eye Protection:** Safety glasses or goggles

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colourless liquid

**pH:** 4 - 5 **Odour:** strong vinegar

**Boiling Point(°C):** approximately 100 - 118

**Solubility in Water:** Infinite

**Melting Point(°C):** approximately 0 - 16.6

**Specific Gravity:** approximately 1.1 - 1.2

**Vapour Pressure:** Not Applicable.

## SECTION 10 - STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal conditions of use and storage. Acetic acid contracts slightly upon freezing which may cause the container to burst.

**Incompatibility:** Strong bases, strong oxidizers, chromic acid, sodium peroxide, nitric acid, perchloric acid.

**Hazardous Decomposition Products:** When heated to decomposition it emits irritating fumes.

**Hazardous Polymerization:** Will not occur.

## SECTION 11 - TOXICOLOGICAL INFORMATION

LD<sub>50</sub>, Oral, Rat (Acetic Acid): 3310 mg/kg, details of toxic effects not reported other than lethal dose value;

LD<sub>50</sub>, Dermal, Rabbit (Acetic Acid): 1.06 g/kg;

LC<sub>50</sub>, Inhalation, Mouse (Acetic Acid): 5620 ppm/1 hr.;

LD<sub>50</sub>, Oral, Rat (Sodium Acetate): 3530 mg/kg;

Information obtained from RTECS ("Registry of Toxic Effects of Chemical Substances").

## SECTION 12 - ECOLOGICAL INFORMATION

# FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

**Head Office :** 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

**Tel + 27 31 003 3486 • Fax + 27 31 502 5825**

**Ecotoxicological Information:** Acetic Acid has high biochemical oxygen demand, and a potential to cause oxygen depletion in aqueous systems, low potential to affect aquatic organisms and a low potential to affect the growth of some plant seedlings.

**Chemical Fate Information:** Acetic Acid has low potential to bioconcentrate. If released to water or soil, Acetic Acid will biodegrade readily.

## SECTION 13 - DISPOSAL CONSIDERATION

Neutralize with 5% Sodium Hydroxide or Sodium Carbonate solutions, then pour into the drain while flushing with water, if allowed. If not allowed, save for recovery or recycling in an approved waste disposal facility. Always dispose of in accordance with local, state and federal regulations.

## 14. TRANSPORT INFORMATION

D.O.T. Shipping

Name: Acetic Acid Solution

D.O.T. Hazard

Class: 8

U.N. / N.A.

Number: UN2790

Packing Group: III

D.O.T. Label : Corrosive(8)

## 15. REGULATORY INFORMATION

**OSHA Status:** These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

**TSCA Status:** All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

**CERCLA Reportable Quantity:** Acetic Acid - 5,000 pounds. Sara Title III:

**Section 302 Extremely Hazardous Substances:**

**Section 311/312 Hazardous Categories:** Acute, Chronic, Fire, Reactivity: Yes Pressure: No

**Section 313 Toxic Chemicals:** No.

## 16. OTHER INFORMATION

All the information and instructions provided in this Material Safety Data Sheet are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. No responsibility will be accepted for errors or omissions or the consequence thereof. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons in receipt of this MSDS to ensure that all people who may use, handle, dispose or in any way come into contact with the product understands this information.