Safety Data Sheet

Aquatic pH
SDS No: 169/08/21
Effective Date: 24/10/2024
Next Revision Date: 24/10/2029
Revision no: 002
Product Code: 169000

SECTION 1
COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

Product Name: **Aquatic pH**
Chemical Identifier: Acetic Acid
Product Use: Adjuvant - Buffer
Restrictions on use: Agriculture

Supplier: **In Line Trading 112 (Pty) Ltd. (Co. Reg. No. 2003/008663/07)**
Cedar Lake Industrial Estate,
C/O M57 & Porcelain Roads, Olifantsfontein, 1666, Gauteng, RSA
Telephone: (011) 392 4072
Website: www.nutrico.co.za

Emergency Contact Numbers
Griffon Poison Information: +27 82 446 8946

SECTION 2
HAZARDS IDENTIFICATION

Classification as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard Classes	Hazard Category	Hazard Statement Code	Hazard Statements
Physical			
Flammable liquids	4	H227	Combustible liquid
Health			
Acute toxicity (oral)	-	-	-
Acute toxicity (dermal)	-	-	-
Inhalation	-	-	-
Skin corrosion	1B	H314	Causes severe skin burns and eye damage
Eye irritation	-	-	-
Reproductive	-	-	-
STOT (SE/RE)	-	-	-
Environmental			
Aquatic (acute/chronic)	-	-	-

Label elements: labelling as defined by Regulation (EC) 1272/2008 [CLP] EU & SANS 10234:2008

Hazard pictograms

Signal word - Danger

Precautionary statements

P101	If medical advice is need, have product container or label at hand
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P264	Wash hands thoroughly after handling.
P280	Wear impervious rubber gloves and chemical safety goggles.
P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water and non-abrasive soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container in accordance with local regulations

Special labelling of certain mixtures – None known

Other hazards – None known

Toxicity: Classification according to GHS: Not classified

SECTION 3
COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:

Composition of Mixture:

Chemical name	CAS No.	EC No.	Conc. %w/w	Classification Regulation (EC) 1272/2008
Acetic Acid	64-19-7	200-580-7	30-60	H227, H314

SECTION 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. Immediately consult a doctor.

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

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 immediately.**

INGESTION: **Do not induce vomiting.** Never give anything by mouth to an unconscious person. Obtain medical attention immediately. Qualified medical personnel should perform administration of oxygen. If the person is alert, rinse mouth thoroughly with water and give person large volumes of water or milk to drink. When vomiting occurs, keep head lower than hips to prevent aspiration.

IMPORTANT ACUTE EFFECTS: Combustible liquid.
Causes severe skin burns and eye damage.

IMPORTANT DELAYED EFFECTS: None known.

NOTE TO PHYSICIAN: This product contains acetic acid**.** Treat symptomatically and supportively.

SECTION 5
FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use carbon dioxide, dry chemical, water fog or foam.

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

Specific hazards: None known

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. Keep upwind. 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. Avoid pollution of waterways by run-off from the site.

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

SECTION 6
ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. Do not breathe in spray mist or fumes. 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. Any spillages or uncontrolled discharges into watercourses should be reported immediately to the police and the Department of Water/Environmental Affairs.

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

Methods & 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 spill material.

Collect washings and add to the drums already collected. Do not flush spilled material or 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.

SECTION 7
HANDLING AND STORAGE

HANDLING

Precautions for safe handling: 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 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. Avoid excess heat. Not to be stored next to foodstuffs, feed and water supplies. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Refer to product label.

Packaging material: Plastic containers and drums.

SECTION 8
EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational exposure limits

Limit value type (country)	Substance name	EC No.	CAS No.	Occupational exposure limit value		Monitoring & observation processes	Peak limitation	Source
				Long term	Short term			
TWA (NIOSH)	Acetic Acid	200-580-7	64-19-7	10 ppm (25 mg/m^3)	-	-	-	Occupational Safety and health guideline for acetic acid
STEL (NIOSH)				-	15 ppm (37 mg/m^3)			

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: For 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.

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

Eye Protection: The use of chemical safety goggles is recommended to prevent against eye contact. Contact lenses are not protective eye devices.

Skin and Body Protection: Wear appropriate protective clothing; boots, hat and equipment to prevent repeated or prolonged skin contact with this substance.

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

SECTION 9
PHYSICAL AND CHEMICAL PROPERTIES

Property	Value/description	Method
Physical state	Liquid	Visual
Colour	Translucent	Visual
Odour	Pungent acidic smell	Organoleptic
pH (1% aqueous dilution)	2 – 3.2	CIPAC MT 75.3
Melting/Freezing point	Not determined	
Boiling point	Not available	
Flash point	Not available	
Flammability	Not flammable	
Vapour pressure	Not available	
Relative Vapour Density	Not available	
Density	1.056 g/ml	Pycnometer
Solubility	Soluble in water	
n-Octanol/Water partition coefficient	Not determined	
Auto-ignition temperature	Not determined	
Decomposition temperature	Not available	
Viscosity	Not available	
Explosive properties	Not explosive	
Oxidising properties	Not oxidising	

SECTION 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: Unlikely to occur.

Conditions to Avoid: Extreme heat or exposure to flames.

Incompatible Materials: Oxidizing agents

Hazardous Decomposition Products: None known

SECTION 11
TOXICOLOGICAL INFORMATION

GHS Classification: Causes severe burns and eye damage (H314)

Toxicity	Effective dose/ concentration	Value	Species	Method/Source
Acute Oral	LD_{50}	7862 mg/kg	Rat	GHS ATE Calculation
Acute Dermal	LD_{50}	2518 mg/kg	Rabbit	
Acute Inhalation	LC_{50}	Not classified as an acute inhalation toxicant		
Skin Corrosion	Causes severe skin burns and eye damage.			
Skin sensitization	Not classified as a skin sensitizer			
Respiratory sensitization	Not classified as a respiratory sensitizer			
Mutagenicity/Genotoxicity:	Not classified as a mutagenic toxicant.			
Carcinogenicity	Not classified as a carcinogen			
Reproductive toxicity	Not classified as a reproductive toxicant			
Specific target organ toxicity:	Not classified as a specific target organ toxicant			
Chronic effects (e.g developmental)	None known			

SECTION 12
ECOLOGICAL INFORMATION

Ecotoxicity This product is not classified as dangerous to the environment.

Toxicity	Effect dose/ concentration	Value	Test duration	Species	Method/Source
Aquatic					
Fish	LC_{50}	45 nom mg/L	96 h	O.mykiss	EFSA Journal 2013;11(1):3060-page47-48
	LC_{50}	43.8 nom	96 h	C. carpio	
Crustacea	EC_{50}	6000 mg/L	24 h	Daphnia magna	
	NOEC	37.9 mm	21 h	Daphnia magna	
Algae	EC_{50}	mg/L	72 h	P. subspicatus	
		5.88 mm			
Terrestrial					
Bees	LD_{50} µg/bees	Acute oral > 110 µg as/bee	-	Honey Bees	EFSA Journal 2013;11(1):3060-page50-52
		Acute contact > 96 µg as/bee			
Earthworms/Arthropods	LC_{50}	>1000 mg as/kg d soil	-	-	

ENVIRONMENTAL EFFECTS

Persistence and degradability: Readily degradable in soil and water

Bio-accumulative Potential: Not bio-accumulative.

Mobility in soil: High mobility in soil.
Other adverse effects: Not determined.

SECTION 13
DISPOSAL CONSIDERATIONS

Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Waste: Open dumping or burning of this product 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. Triple rinse empty containers by inverting the empty container over the spray or mixing tank and allow draining 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 third of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Destroy the container by perforating and flattening and dispose of through an approved waste dump site, incineration plant or recycling company. Observe all labelled safeguards until container is destroyed.

SECTION 14
TRANSPORT INFORMATION

UN Number: 2790

Road Transport ADR/IRD:
Class: 8
Packaging group: III
UN Proper Shipping Name: Acetic Acid Solution, more than 10% and less than 50% acid, by mass

Maritime Transport IMDG/IMO:
Class: 8
Packaging group: III
UN Proper Shipping Name: Acetic Acid Solution, more than 10% and less than 50% acid, by mass
Marine Pollutant (Y/N): No.

Air Transport IATA/ICAO:
Class: 8
Packaging group: III
UN Proper Shipping Name: Acetic Acid Solution, more than 10% and less than 50% acid, by mass

Special/Environmental Precautions: Wedge drums tightly to avoid movement.

Transport in bulk (according to MARPOL 73/78, Annex II and the IBC code): Not available.

SECTION 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

SECTION 16
OTHER INFORMATION

PACKAGING:
Packed in 500 ml, 1 L, 5 L, 10 L, 20 L, 25 L, 210 L & 1000 L plastic containers and drums, 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 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.