SACOA Pty Ltd

MATERIAL SAFETY DATA SHEET

Product Name: N-Flow Fertiliser Treatment

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: N-Flow Fertiliser Treatment

PROPER SHIPPING NAME: CORROSIVE LIQUID, N.O.S. (CONTAINS PHOSPHORYLATED ALCOHOL ETHOXYLATE AND PHOSPHORIC ACID)

RECOMMENDED USE: Compatibilising agent for agricultural Flowable Fertilisers.

SUPPLIER:
SACOA Pty Limited
ACN: 089 114 090
PO Box 469
CLAREMONT WA 6910
Australia

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2. HAZARDS IDENTIFICATION

Hazard classification: Hazardous Substance. Dangerous Goods. This material is classified as hazardous according to health criteria of NOHSC Australia. Classified as Dangerous Goods for the purpose of transport by road or rail. Refer to relevant regulations for storage and transport requirements.

Class: 8 Corrosive
Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

Hazard category: C Corrosive

Risk phrase(s): R34 Causes burns.
R41 Risk of serious damage to eyes.

Safety phrase(s): S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Poisons schedule (Aust): S5.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Appearance: Viscous amber liquid.

CHEMICAL ENTITY	CAS NO.	PROPORTION
Phosphorylated alcohol ethoxylate	39464-66-9	VHIGH
Solvent	-	MED
Water	7732-18-5	MED
Phosphoric acid	7664-38-2	LOW
		100%

PROPORTION (% weight/weight):
VHIGH >60, HIGH 30-60, MED 10-29, LOW 1-9, VLOW <1

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 1126.

Ingestion: Immediately rinse mouth with water. If swallowed do NOT induce vomiting. Give water to drink. Seek immediate medical attention.

Eye contact: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or medical centre.

Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering, or irritation occurs seek medical attention. Skin reaction may be delayed for 1 - 2 days. Wash contaminated clothing before re-use.

Inhalation: Remove victim from exposure. Keep at rest until fully recovered. Seek medical advice.

Medical attention and special treatment: Treat symptomatically. Can cause corneal burns.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: For large fires use water fog, fine water spray or foam. Do not use water jets. For small fires use foam, dry chemical, carbon dioxide or water spray.

Hazards from combustion products: Combustible liquid. On burning will emit toxic fumes including those of oxides of carbon and phosphorus.

Precautions for fire fighters and special protective equipment: Heating can cause expansion or decomposition leading to violent rupture of containers. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus if at risk of exposure to vapour or products of combustion, as well as structural fire fighters uniform.

Hazchem code: 2X

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and inhalation of vapours. Do not touch or walk through spilled material.

Methods and materials for containment and clean up procedures: Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled drums for disposal. Wash area down with water to remove residual material.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid all contact. Use with local exhaust ventilation. Avoid inhaling vapours or spray mists. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Do not dispose of material to sewers or waterways.

Conditions for safe storage: Store in a cool place and out of direct sunlight. Store away from oxidising agents, strong bases and foodstuffs. Keep containers closed at all times - check regularly for leaks. Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National exposure standards

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia). However, Exposure Standards for constituent:

	TWA		STEL		Notices
	ppm	mg/m³	ppm	mg/m³	
Phosphoric acid	-	1	-	3	None

As published by the National Occupational Health and Safety Commission (NOHSC Australia).

Exposure Standard (TWA) is the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour work day.

The Exposure Standards listed represent airborne concentrations of individual chemical substances which, according to current knowledge, should neither impair the health of, nor cause undue discomfort to, nearly all workers. They are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These Exposure Standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Biological limit values: Not Relevant.

Engineering controls: Ensure ventilation is adequate to maintain air concentrations below Exposure Standard. If material is used at elevated temperatures or as an aerosol, use with local exhaust ventilation or while wearing a respirator. Vapour heavier than air - prevent concentration in hollows or sumps. DO NOT enter confined spaces where vapour may have collected. Keep containers closed when not in use.

Personal protective equipment: OVERALLS, RUBBER BOOTS, FACE SHIELD, CHEMICAL GOGGLES, GLOVES (Long), APRON, RESPIRATOR.
Wear overalls, face shield, chemical goggles, elbow-length impervious gloves, splash apron and rubber boots. If inhalation risk exists wear a filter respirator suitable for acidic and organic vapours/particulates meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Viscous amber liquid with a mild sweet odour.

Solubility: Soluble in water, alcohols, esters, aromatic and polar hydrocarbons.

Specific Gravity (25°C):	1.102	Melting Point (°C):	<0
Rel Vapour Density (air=1):	5.59*	Boiling Point (°C):	N Av
Vapour Pressure (25°C):	0.0031 kPa*	Decomp. Point (°C):	N Av
Flash Point (°C):	> 80	Sublimation Point (°C):	N App
Flammability Limits (%):	N Av	pH (1% aqueous soln):	1 - 3
Autoignition Temp (°C):	N Av	Viscosity (25°C):	500 cP
% Volatile by weight (water):	10	Evaporation Rate:	N Av
Solubility in water:	N Av	(n-Butyl acetate=1)	

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable
* = for solvent

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use.

Conditions to avoid: Excessive heat will lead to accelerated oxidative degradation.

Incompatible materials: Reacts with strong oxidising agents and strong bases.

Hazardous decomposition products: Oxides of carbon and phosphorus.

Hazardous reactions: None known.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms that may arise if the product is mishandled are:

Acute Effects

Ingestion: Swallowing can result in irritation, nausea, vomiting and abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Contamination of eyes can result in permanent injury. Corrosive to eyes; contact can cause cornea burns.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.

Inhalation: Inhalation of vapours (from heating), mists or aerosols may produce respiratory irritation.

Long Term Effects: No information available for product.

Acute toxicity / **Chronic toxicity:** No LD50 data available for product.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No LC50 data available for product.

Persistence/degradability: The substance is expected to be readily biodegradable according to the AS 4351 Part 2 test method.

Mobility: No data available for product. Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Empty containers should be forwarded to an approved agent for recycling. Advise disposal agent of acidic nature of product. Avoid unauthorised discharge to sewer.

Special precautions for landfill or incineration: Material suitable for disposal by incineration or landfill through an approved agent.

14. TRANSPORT INFORMATION

Road and Rail Transport: Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by road or rail.

UN-No: 3265

Class: 8 Corrosive

Hazchem code: 2X

Packing group: III

Proper shipping name: CORROSIVE LIQUID, N.O.S. (CONTAINS PHOSPHORYLATED ALCOHOL ETHOXYLATE AND PHOSPHORIC ACID)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), cyanides of Class 6, radioactive substances (Class 7) or food and food packaging in any quantity, however exemptions may apply. Note that concentrated strong alkalis are incompatible with concentrated strong acids.

Marine Transport: Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN-No: 3265

Class: 8 Corrosive

Packing group: III

Proper shipping name: CORROSIVE LIQUID, N.O.S. (CONTAINS PHOSPHORYLATED ALCOHOL ETHOXYLATE AND PHOSPHORIC ACID)

Air Transport: Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN-No: 1760

Class: 8 Corrosive

Packing group: III

Proper shipping name: CORROSIVE LIQUID, N.O.S. (CONTAINS PHOSPHORYLATED ALCOHOL ETHOXYLATE AND PHOSPHORIC ACID)

15. REGULATORY INFORMATION

Country/Region	Inventory	Status
Australia	AICS	All components listed
Canada	DSL	All components listed
Europe	EINECS	Not determined
Japan	ENCS	All components listed
Korea	ECL	All components listed
New Zealand	-	Not determined
United States	TSCA	All components listed

Poisons schedule (Aust): S5

16. OTHER INFORMATION

Literary reference

1. Material Safety Data Sheet 000050169101, 07/2004

Reason(s) For Issue: First issue.

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace.
Since SACOA Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

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