



Yara Nipro Pty Ltd

Material Safety Data Sheet

PRODUCT NAME **FIZ LIQUID FERTILISER**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name YARA NIPRO PTY LTD
Address 1 Park Road, Milton, QLD, AUSTRALIA, 4064
Telephone (07) 3369 3522
Fax (07) 3369 3822
Emergency (07) 3369 3522
Web Site <http://www.yaranipro.com.au/>
Synonym(s) FIZ LIQUID FERTILIZER • FIZ
Use(s) FERTILISER • LIQUID FERTILISER
MSDS Date 25 July 2008

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

RISK PHRASES

R34 Causes burns.

SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

| | | | | | |
|------------------|------|---------------------|----|---------------------------|----------------|
| UN No. | 3264 | DG Class | 8 | Subsidiary Risk(s) | None Allocated |
| Pkg Group | III | Hazchem Code | 2R | EPG | 8A1 |

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | Formula | CAS No. | Content |
|---------------------------|---------------|---------------|-----------|
| PHOSPHORIC ACID | H3-P-O4 | 7664-38-2 | 30-60% |
| NON HAZARDOUS INGREDIENTS | Not Available | Not Available | remainder |

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poison Information Centre or a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Ingestion For advice, contact a Poisons Information Centre or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor Treat symptomatically

First Aid Facilities Eye wash facilities and safety shower should be available.

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5. FIRE FIGHTING MEASURES

| | |
|---------------------------|---|
| Flammability | Non flammable. May evolve toxic gases (phosphorus oxides) when heated to decomposition. Contact with most metals may liberate flammable hydrogen gas. |
| Fire and Explosion | Non flammable. Treat as per requirements for Surrounding Fires: Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas. |
| Extinguishing | Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar. |
| Hazchem Code | 2R |

6. ACCIDENTAL RELEASE MEASURES

| | |
|-----------------|---|
| Spillage | For liquid spills: contact emergency services. Clear area of unprotected personnel. Ventilate area where possible. Wear PVC gloves, a Full-face Type B (Inorganic and acid gas) respirator or Air-line respirator, full-length PVC coveralls and boots. Cover with sodium bicarbonate or 50-50 mixture of sodium carbonate & calcium hydroxide. Collect for complete neutralisation and appropriate disposal. |
|-----------------|---|

7. STORAGE AND HANDLING

| | |
|-----------------|---|
| Storage | Store in cool, dry, well ventilated area, removed from alkalis, metals, nitromethane, sodium tetrahydroborate, heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. |
| Handling | Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas. |

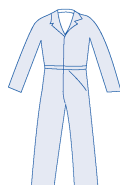
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | | | | | |
|----------------------|-------------------|------------------|------------|--------------|-------------|--------------|
| Exposure Stds | Ingredient | Reference | TWA | | STEL | |
| | | | ppm | mg/m3 | ppm | mg/m3 |
| | Phosphoric acid | NOHSC (AUS) | -- | 1.0 | -- | 3.0 |

Biological Limits No biological limit allocated.

Engineering Controls Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE Wear splash-proof goggles, rubber or PVC gloves, coveralls and a faceshield. When using large quantities or where heavy contamination is likely, wear a PVC apron and rubber boots. Where an inhalation risk exists, wear a Full-face Type B (Inorganic and Acid gas) respirator. If spraying, wear a Full-face Type B-Class P1 (Inorganic and Acid Gas and Particulate) or an Air-line respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-------------------------|----------------------|---------------------------------|---------------|
| Appearance | VISCOUS CLEAR LIQUID | Solubility (water) | SOLUBLE |
| Odour | SLIGHT ODOUR | Specific Gravity | 1.5 |
| pH | 1.5 to 2 | % Volatiles | NOT AVAILABLE |
| Vapour Pressure | NOT AVAILABLE | Flammability | NON FLAMMABLE |
| Vapour Density | NOT AVAILABLE | Flash Point | NOT RELEVANT |
| Boiling Point | NOT AVAILABLE | Upper Explosion Limit | NOT RELEVANT |
| Melting Point | NOT AVAILABLE | Lower Explosion Limit | NOT RELEVANT |
| Evaporation Rate | NOT AVAILABLE | Autoignition Temperature | NOT AVAILABLE |

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10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended conditions of storage.

Conditions to Avoid Avoid heat, sparks, open flames and other ignition sources.

Material to Avoid Incompatible with alkalis (eg. sodium hydroxide), metals (upon contact flammable hydrogen gas may be liberated), nitromethane and sodium tetrahydroborate.

Decomposition May evolve toxic gases (phosphorus oxides) when heated to decomposition.

Hazardous Reactions Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary Corrosive. This product has the potential to cause acute and chronic health effects with over exposure. Use safe work practices to avoid eye and skin contact and vapour inhalation. Over exposure at high levels may result in corrosive tissue damage. Upon dilution, the potential for corrosive effects will be reduced.

Eye Corrosive - irritant. Contact may result in conjunctivitis, lacrimation, pain, corneal burns and possible permanent damage.

Inhalation Corrosive. Over exposure may result in irritation, coughing and bronchitis. At high level exposure may result in ulceration, lung tissue damage, chemical pneumonitis and pulmonary oedema. Symptoms may be delayed following exposure.

Skin Corrosive. Contact may result in irritation, redness, itching, pain, rash, dermatitis and burns. Prolonged or repeated contact may result in ulceration.

Ingestion Corrosive. Ingestion may result in ulceration and burns to the mouth and throat, nausea, vomiting, abdominal pain and diarrhoea.

Toxicity Data PHOSPHORIC ACID (7664-38-2)
LD50 (Ingestion): 1530 mg/kg (rat)
LD50 (Skin): 2740 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION

Environment Phosphoric acid is hazardous to aquatic life at high concentrations. While acidity may be reduced by natural water minerals, the phosphate may persist indefinitely. When spilled onto soil, it will permeate downward, and may dissolve some of the soil matter, especially carbonate-based materials. Some acid will be neutralised, however significant amounts will remain for transport to groundwater.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Wearing the protective equipment detailed above, neutralise to pH 6-8 by SLOW addition to a saturated sodium bicarbonate solution or similar basic solution. Dilute with excess water and flush to drain. Waste disposal should only be undertaken in a well ventilated area.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION



CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

| | | | | | |
|----------------------|---|---------------------|----|---------------------------|----------------|
| Shipping Name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. | | | Subsidiary Risk(s) | None Allocated |
| UN No. | 3264 | DG Class | 8 | EPG | 8A1 |
| Pkg Group | III | Hazchem Code | 2R | | |
| IATA | | | | | |
| Shipping Name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. | | | Subsidiary Risk(s) | None Allocated |
| UN No. | 3264 | DG Class | 8 | | |
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PRODUCT NAME FIZ LIQUID FERTILISER

| | | | | |
|----------------------|---|-----------------|---|--|
| IMDG | | | | |
| Shipping Name | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. | | | |
| UN No. | 3264 | DG Class | 8 | Subsidiary Risk(s) None Allocated |
| Pkg Group | III | | | |

15. REGULATORY INFORMATION

| | |
|------------------------|--|
| Poison Schedule | Classified as a Schedule 5 (S5) Poison using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). |
| AICS | All chemicals listed on the Australian Inventory of Chemical Substances (AICS). |

16. OTHER INFORMATION

Additional Information ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European INventory of Existing Commercial chemical Substances.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m3 - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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PRODUCT NAME FIZ LIQUID FERTILISER

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MSDS Date: 25 July 2008

End of Report