



IAH SALES PTY LTD
 A.B.N. 57 109 433 883
 18 HEALEY CIRCUIT, HUNTINGWOOD NSW 2148
 Telephone (02) 96727944 Fax. (02) 96727988

MATERIAL SAFETY DATA SHEET

NITRECO 1000™ FEED ADDITIVE

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier: IAH SALES PTY LTD
 A.B.N. 57 109 433 883
 18 HEALEY CIRCUIT, HUNTINGWOOD NSW 2148
 Telephone: (02) 96727944 Fax: (02) 96727988
 Website: www.iahp.com.au Email: info@iahp.com.au

Emergency Contact: Poisons Information Centre. Phone Australia 131126; New Zealand 0800 764 766.

Product Name: NITRECO 1000™ FEED ADDITIVE

Other names: Roxarsone; 3-Nitro-4-Hydroxyphenylarsonic acid

Uses: To improve weight gain and feed conversion efficiency in poultry (chickens and turkeys). Use strictly as directed.

SECTION 2. HAZARDS IDENTIFICATION

Australia

Hazard Classification: Hazardous according to Safe Work Australia (SWA) criteria.

Risk Phrases:

T:
 R23/25: Toxic by inhalation and if swallowed.
 N:
 R50: Very toxic to aquatic organisms.
 R53: May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S1/2: Keep locked up and out of the reach of children.
 S20/21: When using, do not eat, drink or smoke.
 S22: Do not breathe dust.
 S24: Avoid contact with skin.
 S25: Avoid contact with eyes.
 S28: After contact with skin, wash immediately with plenty of soap and water.
 S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 S60: This material and its container must be disposed of as hazardous waste.
 S61: Avoid release to the environment.

ADG Classification: NITRECO 1000™ FEED ADDITIVE formulation is classified as a dangerous good according to the Australian Code of Transport of Dangerous Goods (ACTDG).

Proper Shipping Name:

ORGANOARSENIC COMPOUND, SOLID, N.O.S. (3-NITRO-4-HYDROXYPHENYLARSONIC ACID)

UN Number: 3465

Dangerous Goods Class: 6.1 [Toxic]

Subsidiary Risk: N/A.

Packaging Group: II

Hazchem Code: 2X

EPG: 6B5

Poison Scheduling: Schedule 7 – DANGEROUS POISON (Arsenic and its Compounds: Not to be available except to authorised or licensed persons).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL ENTITY	CAS No.	PROPORTION
Roxarsone (3-Nitro-4-Hydroxyphenylarsonic acid) Equivalent to 284.8 g/kg Arsenic (As)	121-19-7	100 %

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SECTION 4. FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131 126; New Zealand 0800 764 766.

- Eye:** If in eyes, flood with lukewarm water for at least 15 minutes with eyelids retracted. If irritation persists, then seek medical attention.
- Skin:** Wash affected area with large amounts of soap and water. Seek medical attention in the event of irritation. After each day's use, wash gloves, face shield, goggles, contaminated clothing, respirator and if rubber wash with detergent and warm water.
- Inhaled:** Remove patient to fresh air. If not breathing, provide artificial respiration assistance and contact a doctor immediately.
- Swallowed:** If swallowed, then contact a doctor immediately. Treat symptomatically according to advice from the doctor. Treatment should be in response to the reactions associated with arsenic poisoning.

Advice to Doctor

Treat symptomatically as for arsenic poisoning.

SECTION 5. FIRE FIGHTING MEASURES

- Flammability:** Non-flammable under normal storage conditions.
- UEL:** No data available.
- LEL:** No data available.
- Suitable Extinguishing Media:** Use water spray, dry chemical, foam or CO₂ to extinguish fires. If water spray is used, then an appropriate method to prevent run-off is required to prevent contamination of waterways. If large quantities are involved in a fire, use water mist, fog or foam – DO NOT use water jets or volume spray. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers. If water is used, then an appropriate method to prevent run-off is required to prevent contamination of waterways.
- Hazards from Combustion Products:** May emit toxic fumes when heated to decomposition. In the case of fires, thermal decomposition will generate smoke containing oxides of carbon, nitrogen and elemental arsenic, Avoid inhalation of vapours.
- Precautions for Fire Fighting and Special Protective Equipment:** Use complete protective clothing including a positive-pressure, self-contained breathing apparatus. Evacuate immediate area. Cool containers by using water spray. If water spray is used, then an appropriate method to prevent run-off is required to prevent contamination of waterways.
- Hazchem Code:** 2X

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Spillages:** **Wear personal protective clothing and equipment (refer to Section 8) when handling spilt product.**
Contain the product by sweeping or vacuuming up spills in a manner to avoid generating dust. Ensure vacuum cleaner has a dust collection filter. Prevent spills from entering streams, ponds or waterways. Collect and seal in a labelled container for disposal as hazardous waste. The immediate area should be washed with lukewarm water and the waste water and dry spills disposed of according to the Waste Disposal Authority. Dispose of empty polyethylene liner at an approved landfill.

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SECTION 7. HANDLING & STORAGE.

Precautions for Safe Handling: DO NOT use near heat, open flames or any other ignition source. Keep out of reach of children. Keep container tightly closed. Use only in a well ventilated area. When handling and opening container, wear personal protective clothing and equipment as described in Section 8. Avoid generating and breathing dust. Personnel handling 3-Nitro must be familiar with the First Aid measures outlined in Section 4. Ensure good industrial hygiene – wash skin and hands thoroughly with soap and water after handling chemicals and before eating, drinking or smoking.

Conditions for Safe Storage: Schedule 7 – DANGEROUS POISON (Arsenic and its Compounds: Not to be available except to authorised or licensed persons). A person who sells or supplies Schedule 7 poisons must keep those poisons in a part of the premises to which the public does not have access.

Keep out of reach of children. Store in original containers below 30°C (room temperature). Protect from light in a dry place and away from ignition sources. When handling container, wear personal protective clothing and equipment, as described in Section 8. Protect from physical damage. Keep container tightly closed.

Classified as a dangerous good for transport purposes.

SECTION 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

National Exposure Standards: An Australian threshold limit value (TLV) have been assigned to Arsenic and its soluble compounds:
Exposure Limit for Arsenic: 0.05 mg/m³ - TWA

Engineering Controls: Do not inhale dust. Use with adequate ventilation to minimize exposure levels. When blending in feed, mechanical extraction should be used to minimize dust.

Personal Protective Equipment: Poisonous if inhaled or swallowed. Will irritate the eyes, nose, throat and skin. Repeated minor exposure may have a cumulative poisoning effect. Avoid contact with skin and eyes. Do not inhale dust when opening container. When preparing dust, wear cotton overalls buttoned to the neck and waist, a washable hat, PVC or rubber apron, elbow PVC gloves, impervious footwear, a face shield or goggles and a half-piece respirator fitted with a dust cartridge or canister. After use, and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, face shield, goggles, contaminated clothing, respirator and if rubber wash with detergent and warm water. **DO NOT** wash contaminated clothing with other household laundry.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

Appearance: Pale yellow, free-flowing powder.

Boiling Point: > 300°C

Flash Point: No data.

Solubility: Slightly soluble in cold water; freely soluble in ethanol or methanol.

Flammability Limits: No data.

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SECTION 10. STABILITY & REACTIVITY

Chemical Stability:	Stable at normal temperatures and pressure.
Conditions to Avoid:	Avoid heat, high temperatures, direct sunlight, open flame and other ignition sources.
Incompatible Materials:	Incompatible with strong acids and bases, and oxidizing agents such as permanganates and peroxides.
Hazardous Decomposition:	May emit toxic fumes when heated to decomposition. In the case of fires, thermal decomposition will generate smoke containing oxides of carbon, nitrogen and elemental arsenic. Avoid inhalation of vapours.
Hazardous Reactions:	No hazardous reactions at normal temperatures and when stored as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS (Active Ingredient – 3-Nitro-4-Hydroxyphenylarsonic acid)

Arsenic compounds are toxic by ingestion, inhalation and skin contact.

Skin:	May cause irritation, itching and skin pigmentation. Avoid contact with skin.
Inhalation:	Inhalation of dusts is toxic. PEL (8 hour TWA, Organic Arsenic – 0.5 mg/m ³ as Arsenic). (Toxic by inhalation)
Swallowed:	Oral LD ₅₀ (Rat): 81 mg/kg Oral LD ₅₀ (Mice): 244 mg/kg Oral LD ₅₀ (Chickens): 110 mg/kg Oral LD ₅₀ (Dogs): 50 mg/kg Oral LD ₅₀ (Turkeys): 61 mg/kg Intraperitoneal LD ₅₀ (Rat): 66 mg/kg Intraperitoneal LD ₅₀ (Chickens): 34 mg/kg (Toxic if swallowed)
Eyes:	May cause irritation. Avoid contact with eyes.

CHRONIC HEALTH EFFECTS (Active Ingredient – 3-Nitro-4-Hydroxyphenylarsonic acid)

Chronic Human Information:	Chronic arsenic poisoning may adversely affect the digestive system such as loss of appetite, cramps, nausea, constipation or diarrhea. Jaundice may occur due to liver damage. Changes in blood, kidneys and nervous system may also occur. Arsenic compounds may also cause skin irritation, itching and pigmentation.
Carcinogenicity:	3-Nitro is classified as a Category 1 Carcinogen by IARC (Arsenic compounds, NOS).
Mutagenicity:	(Rat): 4 mmol/L Cell Type: Liver DNA Damage (Mouse): 400 mg/L Cell Type: Lymphocyte Mutation in mammalian somatic cells.

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SECTION 12. ECOLOGICAL INFORMATION

Do not contaminate dams, rivers, streams or other waterways with the chemical or used container.

ECOTOXICITY (Arsenic Compounds)

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

PERSISTENCE AND DEGRADABILITY (Arsenic Compounds)

No specific data on other environmental toxicity such as persistence and degradation in soil, bioaccumulation, partition co-efficient and mobility in the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Shake and empty contents into medicated feed. Do not dispose of undiluted chemicals on site. Puncture or shred and bury the containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

SECTION 14. TRANSPORT INFORMATION

NITRECO 1000™ FEED ADDITIVE is considered dangerous according to criteria of the Australian Code of Transport of Dangerous Goods (ACTDG).

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UN Number :	3465
Dangerous Goods Class:	6.1 [Toxic]
Subsidiary Risk:	N/A
Packaging Group:	II
Hazchem:	2X
EPG:	6B5

SECTION 15. REGULATORY INFORMATION

Australia:

NITRECO 1000™ FEED ADDITIVE is currently registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA), approval number 64583.

SECTION 16. OTHER INFORMATION

Revised document prepared in March 2012.

DISCLAIMER STATEMENT:

This MSDS has been prepared according to Safe Work Australia/NOHSC guidelines. All information and data herein are believed to be accurate and have been compiled from sources we consider as reliable. It is intended as a guide for safe handling, storage and use in veterinary application, but it is not a specification or guarantee of specific properties. Since IAH Sales P/L cannot anticipate or control the condition of handling and use, or misuse of the product in the workplace, each user should read this Safety Data Sheet, prior to usage, in context of maintaining the product safely. Physical characteristics described herein are typical values based on material tested. The user should take due care to ensure the use and /or disposal of the product and empty container complies with relevant legislation.

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References:

Australian Health Minister's Advisory Council, 'Standard for the Uniform Scheduling of Drugs and Poisons No. 14', AGPS, Canberra 1998.

Worksafe Australia, 'List of Designated Hazardous Substances [NOHSC: 10005 (1994)]', AGPS, Canberra 1994.

Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC: 10008 (1999)]', AGPS, Canberra 1999.

Worksafe Australia, 'Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 1003(1995)]', National Exposure Standards. AGPS, Canberra 1995.

National Road Transport Commission, 'Australian Dangerous Goods Code 7th. Ed', AGPS, Canberra, 2007.

Glossary

UN	=	United Nations
UEL	=	Upper Explosive Limit
LEL	=	Lower Explosive Limit
EPG	=	Emergency Procedure Guide
TWA	=	Time weighted average, defined as the average airborne concentrations of a compound when calculated over a normal eight-hour working day, for a five-day working week.
ACGIH	=	American Conference of Governmental Industrial Hygienists
IARC	=	International Agency for Research on Cancer
NCI	=	National Cancer Institute
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
NOHSC	=	National Occupational Health and Safety Commission