



MATERIAL SAFETY DATA SHEET

ELANCO AF1375 MAXIBAN NARASIN/NICARBAZIN ANTICOCCIDIAL PREMIX

AF1375

Revision No: 4.0 Date 8 November 2010

Company Name and Address:

Elanco Animal Health
A Division of Eli Lilly Australia Pty Ltd
A.B.N. 39 000 233 992
112 Wharf Road, West Ryde, N.S.W. 2114, Australia

Contact Numbers:

Tel: (02) 9878 7777
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Emergency Telephone Numbers:

Elanco Animal Health:
1800 226 324 (Toll free)
OR
Poisons Information Centre:
131126 (Australia-wide)

CHEMWATCH:

1800 039 008: 24 hour emergency contact number (spills and accidents)

Section 1 - Identification

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| Product Name: | ELANCO AF1375 MAXIBAN NARASIN/NICARBAZIN ANTICOCCIDIAL PREMIX |
| Other Names: | Maxiban |
| Manufacturer's Product Code: | AF1375 |
| UN Number: | None allocated |
| Dangerous Goods Class/Subsidiary Risk: | None allocated |
| Hazchem Code: | 2X recommended |
| Poisons Schedule: | 6 |
| Pack Size and Container Type: | 25 kg paper bag |
| Use: | <u>Major Recommended Uses:</u> For the prevention of coccidiosis caused by Eimeria spp in broiler chickens <u>Major Recommended Method of Application:</u> Mixed with feed. |

Section 2 – Hazards Identification

Hazardous according to criteria of Worksafe Australia

Not classified as Dangerous Goods for transport by road and rail according to the criteria of ADG 7

Corrosive to eyes. Irritating to skin and respiratory tract

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| Risk Phrases: | R22 | Harmful if swallowed. |
| | R37/38 | Irritating to respiratory system and skin. |
| | R41 | Risk of serious eye damage. |
| | R43 | May cause sensitisation by skin contact. |
| Safety Phrases: | S2 | Keep out of the reach of children. |
| | S22 | Do not breathe dust. |
| | S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| | S36/37/39 | Wear suitable protective clothing, gloves and eye/face protection |
| | S45 | In case of accident or if you feel unwell seek medical advice immediately (show the label where possible) |

Section 3 – Composition / Information on Ingredients

| Ingredient | CAS | Concentration |
|--|------------|---------------|
| Narasin | 55134-13-9 | 4-9% |
| Nicarbazin | 330-95-0 | 4-9% |
| Other ingredients not individually contributing to hazard* | - | 82-92% |

*May include rice hulls, corn cob grits, soybean mill run, colouring and anti-dusting oil

Section 4 – First Aid Measures

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| Inhalation: | Remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: contact the Poisons Information Centre or doctor. |
| Skin contact: | Remove contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: get medical advice. Wash contaminated clothing before reuse. |
| Eye contact: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice. |
| Ingestion: | Do NOT induce vomiting. Get immediate medical advice. If available, administer activated charcoal (6-8 heaped teaspoons) with 2 to 3 glasses of water. Do not give anything by mouth to an unconscious person. |

If poisoning occurs, contact a doctor or Poisons Information Centre Phone 13 11 26

Section 5 – Fire Fighting Measures

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| Flash Point: | Not applicable |
| Lower Explosion Limit: | No ignition up to 2 kg/m ³ |
| Upper Explosion Limit: | Not applicable |
| Min ignition temp of dust layer | 155°C |
| Extinguishing media: | Use water, carbon dioxide, dry chemical, foam or Halon |
| Hazards from combustion products: | As a finely divided material, may form dust mixtures in air which could explode if subjected to an ignition source. May produce irritating, toxic or asphyxiating fumes when exposed to heat or fire. |
| Precautions for fire fighters: | Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (including fire-fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance. |
| HAZCHEM code: | 2X recommended |

Section 6 – Accidental Release Measures

Emergency Procedures: Wear protective equipment, including eye protection, to avoid exposure. Prevent spill material from entering drains, sewers or waterways. Vacuum material with appropriate dust collection filter in place. Be aware of potential for dust explosion when using electrical equipment. If vacuum is not available, lightly mist material and remove by sweeping or wet wiping. Large spills should be reported to Elanco Animal Health for assistance.

Section 7 – Handling and Storage

Requirements for storage areas and containers: Store in a cool, dry place below 30°C. Protect from moisture and heat. Product should not be used after the date printed on the container

Section 8 – Exposure Controls / Personal Protection

Exposure Guideline: Grain Dust: 4 mg/m³ TWA (Safe Work Australia)
Dust (inspirable) : 10 mg/m³ TWA (Safe Work Australia)
Nicarbazin: 150 mg/ m³ TWA 12 hr (Lilly Exposure Guideline)
230 mg/ m³ TWA 8 hr (Lilly Exposure Guideline)
Narasin: 11 mg/ m³ TWA 12 hr (Lilly Exposure Guideline)

Use in a manufacturing setting:

Engineering measures: Use laboratory fume hood or local exhaust ventilation

Respiratory protection: Use an approved respirator fitted with dust/particulate filter

Eye protection: Chemical goggles and/or face shield

Skin and body protection: Wear cotton overalls buttoned to the neck and wrist and washable hat, elbow length PVC gloves and chemical resistant footwear. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required.

When opening the container and mixing into premixes:

Respiratory protection: Disposable dust face mask covering mouth and nose

Skin and body protection: Cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC and goggles. After each day's use, wash gloves and contaminated clothing.

Section 9 – Physical and Chemical Properties

Appearance: Yellow to tan free-flowing granular material

Odour: Musty

Solubility (water): Insoluble

pH: 6 – 7 (aqueous 50/50)

Safety Data: **Lower explosion limit:** No ignition up to 2 kg/m³
Upper explosion limit: No information found

Section 10 – Stability and Reactivity

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| Stability: | Stable at normal temperatures and pressures |
| Materials to avoid: | May react with strong oxidising agents (e.g. peroxides, permanganate, nitric acid, etc) |
| Hazardous decomposition: | May produce irritating, toxic or asphyxiating gases when heated to decomposition |
| Hazardous reactions: | Hazardous polymerisation not known to occur |

Section 11 – Toxicological Information

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| Acute oral: | LD ₅₀ >500-5,000 mg/kg (Rat) |
| Acute dermal: | LD ₅₀ >5,000 mg/kg (Rabbit) |
| Acute inhalation: | This formulation is not considered to be an inhalation hazard due to its coarse granular nature and its low potential for aerolisation. |
| Skin Irritation: | Irritant (Rabbit) |
| Eye Irritation: | Corrosive (rabbit). Permanent damage prevented by immediate rinsing. |
| Sensitisation: | May cause allergic disorders. |
| Target organ effects: | Narasin -- Nervous system effects (lesions in peripheral nerves, reduced activity, tremors), heart effects (tissue changes, reduced heart rate, abnormal heart rhythm), muscle effects (skeletal muscle tissue changes). Nicarbazin - Nervous system effects (reduced activity), blood effects (decreased red blood cell count), kidney effects (tissue changes) |
| Carcinogenicity: | Not listed as a carcinogen |
| Reproductive toxicity: | No applicable information found |
| Mutagenicity: | Not classified as a mutagen |

Section 12 – Ecological Information

Narasin:

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| Fish: | LC50 >1.4 mg/L (Rainbow trout; 96 hr) |
| Algae: | EC50 0.77 mg/L (Green algae; 72 hr) |
| Crustaceans: | LC50 7.72 mg/L (<i>Daphnia magna</i> ; 48 hr) |

Narasin -- Moderately toxic to plants, worms, birds, and aquatic organisms. Highly toxic to green algae. No significant effects on soil microorganisms at highest tested concentration. Measurable concentrations in the atmosphere are not expected since it is a non-volatile solid. Water-soluble at pH 7 and pH 9. Material will adsorb strongly to sediment or soil. Soil concentrations expected to decline quickly due to fairly rapid degradation. Dissipates from the aquatic environment by photolysis or biodegradation. Material has potential to bioconcentrate in aquatic organisms, however, its rapid biodegradation in soil and photolysis rate make bioconcentration unlikely.

Nicarbazin: Classified by US EPA as being practically non-toxic to aquatic animals. No information available on eco-toxicity to algae. Chronic exposure is considered to have potential to produce adverse effects.

Section 13 – Disposal Considerations

Disposal: After use, shake and empty contents of bags into medicated feed. Do not dispose of undiluted chemicals on site. Puncture or shred and bury empty bags in a local authority landfill. If not available, bury the bag below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty bags and product should not be burned. Large quantities should be disposed of in accordance with local regulations.

Section 14 – Transport Information

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| Road and Rail Transport: | Not classified as dangerous goods when transported by road or rail within Australia |
| Marine Transport: | Not classified as Dangerous Goods for marine transport according to the criteria of the IMDG Code |

Section 15 – Regulatory Information

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| Poison Schedule: | 6 |
| APVMA No: | 36802 |

Section 16 – Other Information

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| Sections Revised: | Format changed to 16 Point, Section 14 – Transport information updated |
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