



**MATERIAL SAFETY DATA SHEET
CARBIGRAN 250 PREMIX**

AF1331

Revision 2.5, 8 November 2006

STATEMENT OF HAZARDOUS NATURE:

"Hazardous according to criteria of Worksafe Australia"

Irritant; R36/37/38 Irritating to eyes, respiratory system and skin.

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

Fax: (02) 9878 7720

Emergency Telephone Numbers:

Elanco Animal Health:

1800 226 324 (Toll free)

OR

Poisons Information Centre:

131126 (Australia-wide)

24 hour emergency contact number, CHEMWATCH **1800 039 008** (spills and accidents)

Section 1 - Identification

Product Name: ElancoAF1331 Carbigran 250 Nicarbazin Premix

Other Names: Carbigran 25 (i.e. 25%), Nicarbazin 25% Premix

Manufacturer's Product Code: AF1331

UN Number: None allocated

Dangerous Goods Class/Subsidiary Risk: None allocated

Hazchem Code: None allocated

Poisons Schedule Number: Unscheduled

Pack Size and Container Type: 25 kg multiwall paper bag.

Use:

Major Recommended Uses: As an aid in the prevention and control of coccidiosis caused by *Eimeria* spp.

Major Recommended Method(s) of Application: Mixed in feed.

Section 2 - Composition / Information on Ingredients

Ingredient	CAS	Concentration %
Nicarbazin	330-95-0	25
Diluent, including Anti-dusting oil	NAIF	73
Microtracer F-Red	NAIF	2

Diluent may include rice hulls, corn grits, or similar.

Contains no hazardous components (one percent or greater) or carcinogens (one-tenth percent or greater) not listed above.

Exposure Guidelines: Nicarbazine - LEG 150 micrograms/m³ TWA for 12 hours, LEG 230 micrograms/m³ TWA for 8 hours.

Grain Dust - PEL 10 mg/m³ TWA. TLV 4 mg/m³ TWA for 8 or 12 hours (total). Lilly preferred exposure limit is TLV.

The anti-dusting oil reduces potential exposure under normal conditions of use or in a foreseeable emergency.

Section 3 - Hazards Identification

Appearance: Yellow to tan free-flowing granular material

Physical State: Solid

Odor: Odourless

Emergency Overview

Primary Physical and Health Hazards: Irritant. Blood and kidney effects.

Caution Statement: Carbigran 250 Premix may be irritating to the eyes, skin, and respiratory tract. Effects of exposure may include decreased red blood cell count and kidney tissue changes.

Routes of Entry: Inhalation and skin contact.

Potential Signs and Symptoms of Occupational Exposure: None reported; however, fine dust or particles of nicarbazine may mechanically irritate eyes and respiratory tract. Prolonged exposure to high concentrations of grain dust may cause irritation of the eyes, skin, respiratory tract and mucous membranes. Based on animal studies, may be irritating to the eyes, skin, and respiratory tract.

Medical Conditions Aggravated by Exposure: Hypersensitivity to nicarbazine.

Carcinogenicity: All ingredients - No carcinogenicity data found. Not listed by IARC, NTP, ACGIH, or OSHA.

Section 4 - First Aid Measures

Eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. See an ophthalmologist (eye doctor) or other physician immediately. Immediate rinsing may prevent permanent damage.

Skin: Remove contaminated clothing and clean before reuse. Wash all exposed areas of skin with plenty of soap and water. Get medical attention if irritation develops.

Inhalation: Move individual to fresh air. Get medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance (mouth-to-mouth) and call a physician immediately.

Ingestion: Do not induce vomiting. Call a physician or Poisons Information Centre. Phone 13 1126 (Australia-wide). If available, administer activated charcoal (6-8 heaping teaspoons) with two to three glasses of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

Section 5 - Fire Fighting Measures

Flash Point: Not applicable.

UEL: No applicable information found.

LEL: No ignition up to 2.0 oz/cu ft.

Minimum Ignition Temperature of Dust Layer: 190°C (374°F)

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

Unusual Fire and Explosion Hazards: As a finely divided material, may form dust mixtures in air which could explode if subjected to an ignition source.

Hazardous Combustion Products: May emit toxic fumes when exposed to heat or fire.

Section 6 - Accidental Release Measures

Spills: Contain dry material by sweeping up or vacuuming. Vacuuming may disperse dust if appropriate dust collection filter is not part of the vacuum. Be aware of potential for dust explosion when using electrical equipment. Large spills due to traffic accidents, etc., should be reported immediately to Elanco Animal Health for assistance. Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes. Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions).

Section 7 - Handling and Storage

Storage conditions: Store below 30°C (Room Temperature) in a dry place.

Section 8 - Exposure Controls / Personal Protection

See Section 2 for Exposure Guideline information.

When mixing and handling, use protective clothing, impervious gloves, and dust respirator. Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with plenty of water.

Respiratory Protection: Use an approved respirator.

Eye Protection: Chemical goggles and/or face shield.

Ventilation: Laboratory fume hood or local exhaust ventilation.

Other Protective Equipment: In a manufacturing setting, wear chemical-resistant gloves and body covering to minimise skin contact. 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.

Other Handling Precautions: Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and water after handling. **CAUTION:** Do not feed to laying chickens.

Section 9 - Physical and Chemical Properties

Boiling Point: Not applicable.

Melting Point: Binder begins to melt at about 60°C (140°F).

Specific Gravity: No applicable information found.

pH: 5-6 (aqueous 50/50).

Evaporation Rate: No applicable information found.

Water Solubility: Insoluble.

Vapor Density: No applicable information found.

Vapor Pressure: No applicable information found.

Section 10 - Stability and Reactivity

Stability: Stable at normal temperatures and pressures.

Incompatibility: May react with strong oxidizing agents (e.g., peroxides, permanganates, nitric acid, etc.).

Hazardous Decomposition: May emit toxic fumes when heated to decomposition.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Animal Toxicity Data Single Exposure

Oral: Rat, 5000 mg/kg, mortality.

Skin: Rabbit, 5000 mg/kg, no deaths or toxicity.

Inhalation: This formulation is not considered to be an inhalation hazard due to its coarse granular nature and its low potential for aerosolisation.

Skin Contact: Rabbit, irritant.

Eye Contact: Rabbit, irritant.

Animal Toxicity Data Repeat Exposure

No data available for mixture or formulation. Data for ingredient(s) or related material(s) are presented.

Target Organ Effects: Nicarbazin - Nervous system effects (reduced activity), blood effects (decreased red blood cell count), kidney effects (tissue changes).

Reproduction: No applicable information found.

Sensitization: No applicable information found.

Mutagenicity: Nicarbazin - Not mutagenic in bacterial or mammalian cells.

Section 12 - Ecological Information

No applicable ecological information found.

Section 13 - Disposal Considerations

Disposal of bags: Shake and empty contents 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 burnt.

Section 14 - Transport Information

No special transport requirements necessary.

Section 15 - Other Information

Sections revised: Header and Footer: Removed automatic print date from header. Pagination changed to page number only.:Added CHEMWATCH contact details.. Section 15: Deleted contact point details.

As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be

a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product.

GLOSSARY

(Abbreviations Used in Material Safety Data Sheets)

ACGIH = American Conference of Governmental Industrial Hygienists
AIHA = American Industrial Hygiene Association
BEI = Biological Exposure Index
CAS Number = Chemical Abstract Service Registry Number
CERCLA = Comprehensive Environmental Response Compensation and Liability Act (of 1980)
CHEMTREC = Chemical Transportation Emergency Center
DOT = Department of Transportation
EC = European Community
EINECS = European Inventory of Existing Chemical Substances
ELINCS = European List of New Chemical Substances
EPA = Environmental Protection Agency
HEPA = High Efficiency Particulate Air (Filter)
IARC = International Agency for Research on Cancer
ICAO/IATA = International Civil Aviation Organization/International Air Transport Association
IEG = Lilly Interim Exposure Guideline
IMO = International Maritime Organization
LEG = Lilly Exposure Guideline
LEL = Lower Explosive Limit
MSDS = Material Safety Data Sheet
NA = Not Applicable, except in Section 14 where NA = North America
NADA = New Animal Drug Application
NAIF = No Applicable Information Found
NCI = National Cancer Institute
NIOSH = National Institute for Occupational Safety and Health
NOS = Not Otherwise Specified
NTP = National Toxicology Program
OSHA = Occupational Safety and Health Administration
PEL = Permissible Exposure Limit (OSHA)
RCRA = Resource Conservation and Recovery Act
RQ = Reportable Quantity
RTECS = Registry of Toxic Effects of Chemical Substances
SARA = Superfund Amendments and Reauthorization Act
STEG = Lilly Short Term Exposure Guideline
STEL = Short Term Exposure Limit
TLV = Threshold Limit Value (ACGIH)
TPQ = Threshold Planning Quantity
TSCA = Toxic Substances Control Act
TWA = Time Weighted Average/8 Hours Unless Otherwise Noted
UEL = Upper Explosive Limit
UN = United Nations
WEEL = Workplace Environmental Exposure Level (AIHA)