



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Vitavax 200FF Seed Treatment
Other Names: Carboxin & Thiram
Product Codes: D735/ENT 987
Recommended Use: For seed treatment of various crops for control of seedling fungal diseases and for improved crop establishment.
Chemical Family: Carbamate-phenylcarbamate/carbamate-dithiocarbamate
Supplier: Chemtura Australia Pty Ltd
ABN: 005 225 507
Street Address: Level 7, 435 King William Street
Adelaide South Australia 5000
Telephone Number: 61 8 8112 0900
Facsimile Number: 61 8 8112 0999
Emergency Telephone: 1800 033 111 (24-hour service)

2. HAZARDS IDENTIFICATION

Hazard Classification: **HAZARDOUS SUBSTANCE, DANGEROUS GOOD**
Classified according to the criteria of the National Occupational Health and Safety Commission (NOHSC).

Risk Phrases: **Harmful (Xn)**
R20/22 ... Harmful by inhalation and if swallowed
R36/37 Irritating to eyes and respiratory system
R43 May cause sensitisation by skin contact
R68 Possible risk or irreversible effects

Safety Phrases: S(2) - 36/37 Wear suitable protective clothing and gloves

Poisons Schedule: S6

Dangerous Goods Class: 9, Miscellaneous Dangerous Good

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Identity	Common Name(s) and Synonym(s)	CAS Number	Proportion by Weight
Carboxin	Carboxin	5234-68-4	200g/L
Thiram	Thiram	137-26-8	200g/L

Note: Australian and US Patents apply.

4. FIRST AID MEASURES

Ingestion: If patient is fully conscious, administer large quantities of water. DO NOT give alcohol. Seek medical advice.

Inhalation: Remove to fresh air. If breathing difficulties occur, seek medical advice.

Eye Contact: Hold eye(s) open and flush with water for 15 minutes. Seek medical advice

Skin Contact:	Wash thoroughly with soap and water. Remove contaminated clothing and launder before reuse
Advice to Doctor:	Treat symptomatically.
First Aid Facilities:	Eye wash station.
Additional Information:	If poisoning occurs contact a doctor or Poison Information Centre. Phone Australia 131 126; New Zealand 03 4747 000

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water spray or dry chemical. Contain runoff.
Hazards from Combustion Products:	Not flammable. Although in case of fire, protect against inhalation of combustion products. On combustion, there may be production of phosgene, hydrogen chloride and oxides of nitrogen.
Precautions for Fire fighters and Special Protective Equipment:	Protect against inhalation of combustion products.
HazChem Code:	2 X
Additional Information:	None allocated

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	If there is a contamination of crops or waterways, advise emergency services or State Department of Agriculture.
Methods and Materials for Containment and Clean-Up Procedures:	Absorb onto inert material. Transfer into secure containers for proper disposal. Use personal protective equipment as outlined above. Do not contaminate watercourses or drains with the product or containers. Do not reuse the container for any purpose.

7. HANDLING AND STORAGE

Precautions for Safe Handling:	Harmful if inhaled. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Interacts with alcohol - avoid alcohol on day(s) of use. Do not inhale spray mist. When opening the container and using the product, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and face shield or goggles. When handling treated seed, wear elbow length PVC gloves. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. 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 or goggles and contaminated clothing.
Conditions for Safe Storage:	Store and transport in accordance with the Australian Code for the Transport of Dangerous Goods by Road & Rail. This material is a Scheduled Poison (S6) and must be stored, maintained and used according to the relevant regulations. Store in original container, away from seeds, fertilizers, animal and human feedstuffs, strong oxidising agents and sources of direct heat. Keep dry and out of direct sunlight. Store below 40°C. Keep containers closed when not in use.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National Exposure Standards:	Recommended hygiene standards: Carboxin - None allocated Thiram - 1 mg/m ³ (TWA) Ethylene glycol - 60 mg/m ³ (TWA) & 120 mg/m ³ (STEL) Amorphous silica - 2 mg/m ³ (TWA)
Biological Limit Values:	Not available
Engineering Controls:	Sufficient ventilation to minimise vapour exposure. Ensure ventilation is adequate to maintain air concentrations below exposure standards listed above. Keep containers closed when not in use.
Personal Protective Equipment (PPE):	Avoid all personal contact. When using, do not eat, drink or smoke. Wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield or goggles. In the absence of adequate ventilation, use a respirator fitted with an agricultural chemical cartridge(s). If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking, smoking or using the toilet, wash hands, arms and face thoroughly with soap and water. Launder clothing before storing or reusing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Red-purple liquid suspension
Odour:	Faint odour
pH:	Not available
Boiling Point:	104.5°C
Solubility:	Dispersible in water
Specific Gravity (Water = 1):	1.18
Decomposition Temp:	Not available
Flashpoint:	105°C
Vapour pressure at @ 20°C	14 mm Hg

10. STABILITY AND REACTIVITY

Chemical Stability:	Light stable, will thicken irreversibly with heat
Conditions to Avoid:	No data available
Incompatible Materials:	Strong acids and alkalis
Hazardous Decomposition Products:	No data available
Hazardous Reactions:	No data available
Polymerisation:	No data available

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:

Acute Health Effects:

Ingestion: Mildly toxic. May cause vomiting and headache.

Acute oral LD50 (rat) = 4500 mg/kg

Eye: Contact with eyes may cause irritation

Skin: Contact with skin may cause irritation

Acute dermal LD50 (rabbit) > 4000 mg/kg

Inhalation: Individuals with respiratory problems should avoid inhalation exposure.

Acute inhalation LC50 (rat, 4 hour) > 0.83 mg/L

(rat - 1 hour) > 20 mg/L (carboxin only)

(rat - 4 hour) = 4.42 mg/L (thiram only)

Chronic Health Effects:

General: Due to the presence of thiram, exposure can produce an adverse reaction when alcohol is consumed. Overexposure may produce kidney damage. Individuals with kidney problems should avoid exposure to this material. Thiram may also cause damage to the nervous system, blood & liver.

Skin: Carboxin has a low dermal toxicity but due to the presence of thiram, repeated minimal contact to the product may cause sensitisation and dermatitis.

Toxicology: Studies in animals have shown that repeated doses of carboxin do not produce carcinogenic or teratogenic effects. Studies in experimental animals have shown that repeated doses of thiram do not produce carcinogenic effects whilst high, maternotoxic doses of thiram produce a few teratogenic effects

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Highly toxic to fish due to presence of thiram.

LC50 Salmo (trout) 0.13 mg/L (Thiram technical)

Not toxic to bees. Not toxic to birds.

Acute oral LD50 Redwing Blackbird > 100 mg/kg (Thiram technical)

Persistence/Degradability:

Not available

Mobility:

Not available

13. DISPOSAL CONSIDERATIONS

Disposal Method(s):

Disposal after intended use: Triple, or preferably pressure, rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If recycling, break crush or puncture and bury empty containers in a local authority landfill. If landfill is not available, bury containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of

waterways, desirable vegetation and roots.

Disposal after accident or spill: Dispose of sealed containers at an approved local waste disposal site.

Precautions for Landfill or Incineration:

Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Carboxin and Thiram) MARINE POLLUTANT
DG Class & Subsidiary Risk: 9, Miscellaneous Dangerous Good
Packing Group: III
EPG/GTEPG: Guide 47
Special Precautions for User: None available
HazChem Code: 2X
Other Information: None available

15. REGULATORY INFORMATION

Poisons Schedule: S6
Additional Information: APVMA Product No. 55760

16. OTHER INFORMATION

Date of Preparation: April, 2006
Revision Date: April, 2008
Revision Number: 1
Revision Summary: Rev 1 - Update of Chemtura contact details.

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